

Thurston County Lease and Space Planning

Report #3

Health, Transportation Agencies and Legislative Building Project Summaries

*Update on
Current Planning*

3



Washington State Department of
General Administration

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Table of Contents

PREFACE	3
THURSTON COUNTY LEASE AND SPACE PLANNING.....	5
Executive Summary	5
SECTION I. ADDITIONAL SPACE PLANNING CONSIDERATIONS	7
Understanding JLARC Lease vs. Ownership Model Results.....	7
Public Works Procurement Methods for State Office Construction	22
Leasing and Ownership Considerations	23
Paying for Tenant Improvements	28
Thurston County Leasing Practices	30
Thurston County Preferred Leasing Policy	35
SECTION II. STUDY PLAN UPDATE.....	37
Update on Cost Planning Factors	37
Preliminary 10 Year Employment and Staff Forecasts	37
Demographic Profile of Thurston County Leased Space.....	43
Thurston County Office Lease Location Analysis	44
Thurston County Lease Development Projects under Construction.....	45
Next Thurston County Lease and Space Planning Activities.....	45
Possible changes to the 1991 State Capitol Master Plan	46
SECTION III. AGENCY-LEVEL PLANNING UPDATE	51
Governor's Supplemental Budget Request for Department of Health	51
Next Steps – Department of Health Project.....	58
Summary of Transportation Agencies Co-Location Report	59
Next Steps – Transportation Agencies Project	66
Summary of Space Requirements from Legislative Building Commission Study.....	67
Thurston County DSHS Leased Facilities.....	68
APPENDIX A: SPACE REQUEST AND OTHER LEASING FORMS	
APPENDIX B: HOUSE CAPITAL BUDGET STATE LEASING POLICY SUBCOMMITTEE REPORT, DEC. 2, 1999	

APPENDIX C: LETTERS FROM LOCAL GOVERNMENT OFFICIALS ON PREFERRED DEVELOPMENT AND PREFERRED LEASING AREAS

APPENDIX D: JLARC PRESENTATION ON LEASE VS. OWN MODEL TO HOUSE CAPITAL BUDGET, NOV. 8, 1999

APPENDIX E: IMPACT FEES FOR OFFICE BUILDINGS THE OLYMPIAN, NOV. 21, 1999

Preface

This is the third in a series of reports on the Department of General Administration-led Thurston County Lease and Space Planning Project. This eighteen-month project was directed in the 99-01 Capital Budget.

Report #1 was issued in September 1999. It:

- Summarized direction from statute, plus the 99-01 Capital, Operating and Transportation budgets.
- Summarized many years of reference materials and recent office projects, and provided a complete description of all state leased and owned office facilities in Thurston County.
- Detailed GA's plan for assessing facilities needs, defining facility performance and cost standards, reviewing current state-management practices, and developing improved ways to plan for new leased and owned office space.
- Provided the status on facility planning being done by the Department of Health and the state's transportation agencies.

Report #2 was issued in November 1999 to assist the Governor and Legislature in reviewing agency requests for new space that might result in 2000 Supplemental Budget action. It identified potential Olympia and Tumwater sites that could meet the needs of those projects, preliminarily identified special requirements associated with developing those sites including potential mitigation, and reviewed how project options conformed to the 1991 Thurston County Master Plan. It also:

- Described the state's general approach to locating new state offices.
- Explained the JLARC lease versus ownership cost model.
- Summarized state laws governing office procurement.
- Summarized national research on transportation management strategies.
- Presented a case study on the recent consolidation of the Department of Retirement Systems.

It also:

- Proposed a new performance and technology specification of the state's 21st century office buildings.
- Suggested an appropriate cost for that standard.
- Presented comparative space standards.

This report, Report #3, provides additional lease and space planning information including more specific information about space needs for the departments of Health, Transportation, Licensing, State Patrol, Social and Health Services, and executive and legislative activities currently supported by the Legislative Building, but which have to be relocated when the Legislative Building is renovated.

Copies of this report will be distributed to legislative fiscal committees, local legislators, local governments, state agencies, local developers and lessors, and the media.

Questions, suggestions or comments on this report are encouraged. Please direct them to Grant Fredricks, Deputy Director, Department of General Administration at PO Box 41000, Olympia, WA 98504-1000, phone number (360) 902-7203 or e-mail: gfredri@ga.wa.gov.

Thurston County Lease and Space Planning

EXECUTIVE SUMMARY

The Governor's December 16, 1999 Supplemental Budget requests authority for GA to procure a replacement leased facility for the Department of Health (DOH) by 2003 with an option to later purchase that office building. DOH estimates that the most cost effective consolidation approach for them is to lease develop a 261,500-square-foot facility in one phase. The Governor has requested a \$400,000 capital-office building-planning appropriation to start this project in the spring of 2000. The project would be completed in 2003.

The legislature will be receiving two other reports in response to their 1999 session direction.

- In January, the Legislative Building Preservation and Renovation Commission will be identifying the need for additional space to accommodate infrastructure rehabilitation and public support space plus propose a new Capitol Addition.
- GA will be submitting a study report on a proposal to co-locate transportation funded agencies currently leasing space into a single large office building. Six development scenarios will be presented on three state-owned properties.

This report summarizes these three study efforts and lays the groundwork in the following six policy areas for decisions that the Legislature and the State Capitol Committee will make next year:

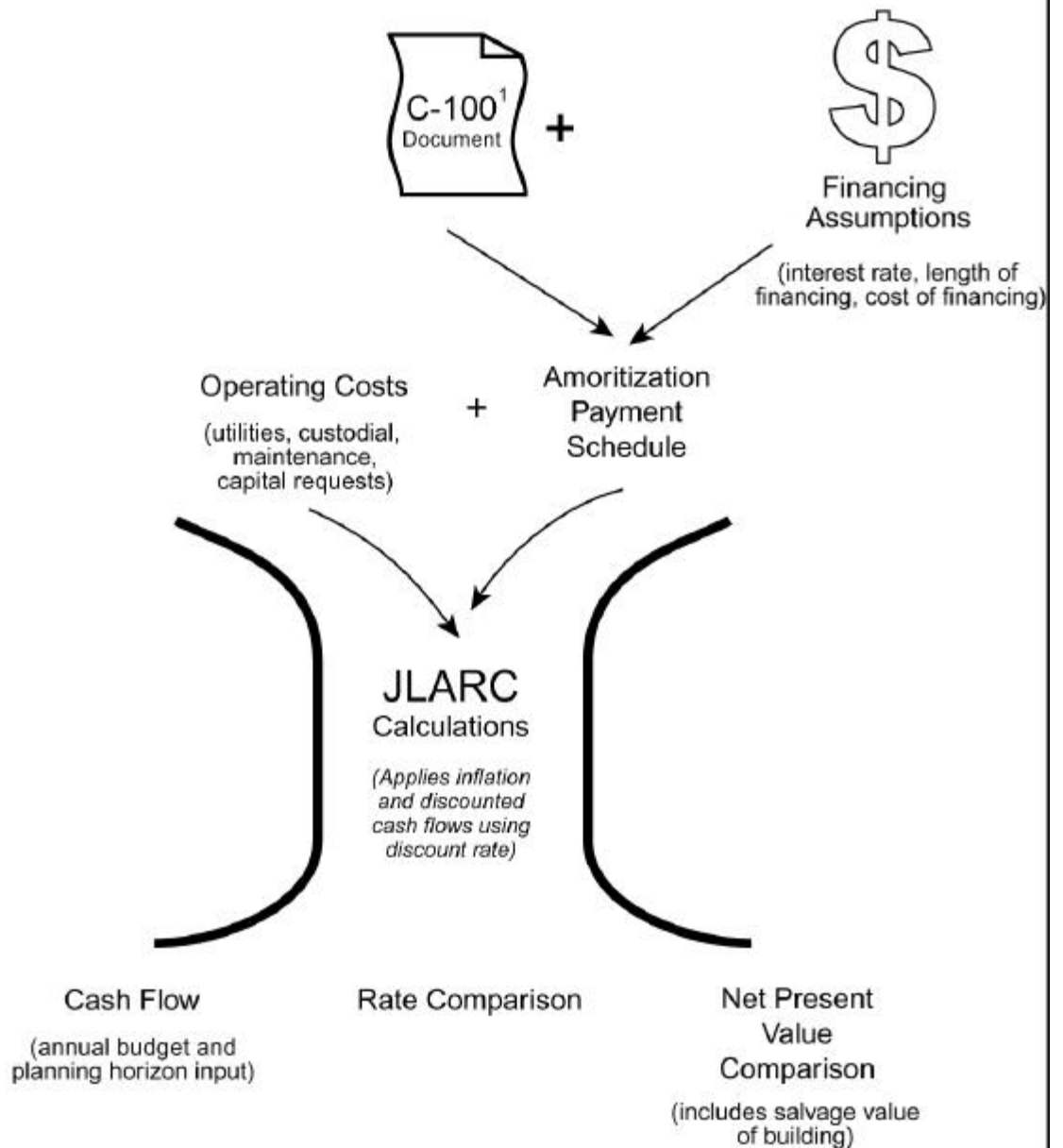
1. **How will the state's current and future budgets be affected by these projects?** Report #3 explains how the state's JLARC lease versus ownership model can be used to identify project, life cycle, and discounted life-cycle costs.
2. **Choosing between building to own and leasing.** A summary of the common reasons cited by private developers, building owners, and public officials about the advantages and disadvantages of owning and leasing is presented.
3. **Building to meet today's needs or building for the future.** This report begins an analysis of the growth in state employment over the next 10 years and the space implications of that growth. Much of the 10-year-lease and space program to be presented in December 2000 will be based on this forecast.
4. **Deciding where to locate state office buildings.** This report explores options for providing the best public service delivery, best support community development and regional transportation, optimize agency spending, and create the most investment value for the public. Refinements of the *Preferred Development Areas (PDAs)* in the 1991 Master Plan and local government-designated *Preferred Leasing Areas (PLAs)* are proposed. The location of state leases within these PDAs and PLAs is summarized.
5. **Agreeing on office building performance, space, transportation and cost standards for both state-owned and state-leased offices.** Report #3 builds on the standards initially proposed in Report #2.
6. **Coordinating state leasing decisions between state agencies and between executive and legislative branches.** A leasing policy framework for the Leasing Policy envisioned in the 1991 Master Plan, incorporating the previous 5 subjects, is being developed to present to the State Capitol Committee at their Spring 2000 meeting.

Section I. Additional Space Planning Considerations

UNDERSTANDING JLARC LEASE VS. OWNERSHIP MODEL RESULTS

JLARC Model

(Joint Legislative Audit & Review Committee)



1. Construction/acquisition cost document

Background

In 1993 Governor Gardner appointed the *Real Estate Business Advisory Council* (BAC) to advise the Department of General Administration on real estate issues. One of the BAC recommendations was for GA to develop a policy for state agencies on the cost of capital.

In 1994 the Legislature adopted ESHB 2237, which states:

Prior to the construction of new buildings or major improvements to existing facilities or acquisition of facilities using a lease purchase contract, the director of general administration shall conduct an evaluation of the facility design and budget using life cycle cost analysis, value-engineering, and other techniques to maximize the long term effectiveness and efficiency of the facility or improvement. (Section 7.9)

There are uncertainties inherent in assessing projects such as real-estate purchases, complex-leasing proposals, and construction programs. In such a decision-making environment a life-cycle-cost analysis, such as required by ESHB 2237, stresses the interrelationship of the investment, the operations, and the financing package. In order to conduct a life cycle cost analysis and recognize the time value of money, a *cost of capital* must be predetermined.

In a letter dated May 24, 1994, the Governor's staff director, Harry Thomas, called on GA to work with OFM and the Treasurer to "develop a policy and implementation plan to ensure the systematic review of capital expenditures, including but not limited to real estate, accounts for cost of capital as well as availability of capital, occurs prior to budget approval."

In December 1995 the Legislative Budget Committee (LBC) – now known as the Joint Legislative Audit and Review Committee (JLARC) – issued its report (extensively described in Report #2 – page 11). That report identified areas that would strengthen the current process:

- Quality and completeness of data – all potential costs and savings need to be taken into account.
- Comparability of data – use the same units (e.g. rentable square feet).
- Consideration of all economic costs – include all costs (such as insurance costs).
- Relation of economic costs to other considerations – after the comparative-cost analysis other factors need to be considered (such as employee working conditions, improved public access, etc.)
- Sensitivity analysis – show how changes in assumptions will effect the outcome of the analysis.
- Benchmarks – called for the establishment of reasonable ranges for the costs and factors being considered in the analysis.
- Discount rate – discussed the establishment of a discount rate. Recommended using real-discount rate of five percent.
- Utilization of vacant space – noted that there was no process in place to ensure that vacant state-owned space will be occupied in lieu of leasing space.
- Reserves for major systems periodic repair and replacement – indicated that an annual amount should be included for repair and replacement for all owned space.
- Capturing savings – noted that there is no process for ensuring that operational savings used to justify projects are tracked, reported, and achieved.

The following are the recommendations of the LBC in that report:

1. The Legislature should require that life cycle cost analyses address all of the relevant cost considerations to state government, as well as to the taxpaying public.
2. The Legislature should establish benchmarks for the major assumptions in life-cycle-cost analyses.
3. The Legislature should require that for each project requiring a life-cycle-cost analysis, the Director of the Office of Financial Management shall review the analysis and attest to its accuracy and completeness. This review should include a sensitivity analysis and should take place prior to submission of the project to the Legislature for approval, or in the case of long-term leases, prior to the Department of General Administration entering into the lease.
4. The Legislature should require that for any life-cycle-cost analysis that uses an assumption that is different from an established benchmark, an explanation for that use be included as part of the analysis.
5. The Legislature should require that for project proposals in which estimates of operational savings are included, the agencies that would be responsible for achieving the savings submit plans, as part of the proposals, for reducing agency spending commensurate with the estimated savings.
6. The Legislature should require that the Director of the Office of Financial Management establish a process for tracking and reporting operational savings identified in the agency plans that are included in legislatively approved projects and long-term leases.
7. The Legislature should authorize the establishment of reserve funds that would be adequate for major systems periodic repair and replacement.

What is Life Cycle Cost Analysis? A life-cycle-cost (LCC) analysis is an effort to recognize the total costs of various options, compare those total costs, and then select the option with the lowest costs. A life-cycle-cost analysis generally covers an extended period of time (e.g., the life of the asset, 25 years, etc.). The LBC study notes that:

... a full economic analysis is important because it can help to explain the ways in which alternatives are more or less cost-effective. This can lead to cost savings in two ways: 1) by identifying the most cost-effective alternative; and 2) by identifying savings within the selected alternative (for example, ensuring that the space efficiency and development costs of a state-developed project will be competitive with a privately developed project).

Life cycle costing applies economic principles for the purpose of improving acquisition decisions by considering the total long-term costs of the facility decision. It is related to and uses many of the tools of other economic methods such as feasibility analysis and value engineering in that the focus of LCC decision-making is on minimizing cost. *The premise of life cycle costing is that, because buildings provide a service over a period of time, future as well as present costs are important in minimizing total facility costs.*

Historically, life-cycle-cost analysis was used to evaluate building design alternatives from a technical perspective. That is, it was used to assess the energy costs, building renewal and replacements, and operating and maintenance costs of buildings. However, *recent trends are for life-cycle cost analysis to be used to assess the choices between lease vs. buy, different project proposals which meet the same need, and financing options.*

Most facility-acquisition decisions involve choosing among alternatives that have different costs. Many of these costs are explicit in that they require known cash payments for goods or services. However, in other situations the costs and benefits associated with a decision are uncertain and may occur at some future time. This is almost always the case with buildings, since costs associated with buildings (financing, lease costs, operating costs, etc.) as well as the benefits received from the use of buildings are always spread out over a relatively long period. In addition, many of the benefits (e.g., greater employee productivity) may be difficult to quantify.

The question then arises as to how these future costs and benefits can be accommodated in an acquisition decision that must be made today. To make such decisions, the LCC analysis is one evaluation mechanism by which lifetime costs and benefits can be compared. The LCC process allows alternative projects to be compared against each other.

Life-cycle costing is as an economic evaluation process that can assist in deciding between alternative building investments by comparing all of the significant, differential costs of the building over a given period in equivalent dollars. A principle of a sound decision is that all alternatives under consideration must be compared over the same time interval. Despite the existence of unequal lives, the time spans over which alternatives are considered must be equal. For alternatives with unequal lives, assumptions must be made regarding what will happen during the gaps. *The purpose of the life-cycle-cost concept is to make explicit the interrelated effects of costs over the total life span.* The objective of the project-selection process is to minimize the life-cycle costs among projects and (within a given project) between prospective costs during the acquisition phase and those during the operation phase.

There are many factors to be considered in life cycle economic analysis. Assumptions must be made, data must be collected and evaluated, functional relationships must be established, and the data must be brought to current-day terms. The specifics of developing a life-cycle-cost model will be reviewed in the next section.

A project decision involves making a choice among two or more feasible alternatives. Developing and defining the feasible alternatives for evaluation is important because of the resulting impact on the quality of the decision. The life-cycle-cost analysis process refers to the summation of all **unique** recurring and non-recurring costs related to a project during its life span. A quality LCC will provide information on which decision-makers can compare alternatives. For a facility project it begins with the identification of the need and ends with retirement and disposal activities.

Building Life Cycles. The life cycle may be divided into three general time periods: the acquisition phase, the operation phase, and the disposal phase. ([See Endnote #1 – Steps in Life Cycle Cost Analysis](#))

The acquisition phase begins with an analysis to make explicit the requirement or concept of the facility. The conceptual-design activities translate the defined technical and operational requirements into a preferred preliminary design. Included in these activities are development of the feasible alternatives, and economic analysis to assist in selection of the preferred option. The next group of activities in the acquisition phase involves up-front financing, planning, and design. This is followed by the activities necessary to prepare, acquire, and make ready for operation the materials necessary for construction. The final step in the acquisition phase involves construction (or lease) and move in.

Whereas acquisition costs occur only once in getting the project started, operation-maintenance costs will be experienced continually over the life of the building. **The operation phase** includes labor costs of operations and maintenance personnel, heating and other utility costs, parts costs, costs for insurance and taxes (if applicable), and a fair share of indirect costs. The timing of their occurrence differs substantially, in that operating and maintenance costs occur over time until the structure is retired from service. The other major cost, which the state will generally experience over the life of the building, is bond payments. Bond repayment schedules need to be prepared which amortize the bond repayment according to project financing requirements.

The disposal phase occurs only once. This phase includes all costs related to the sale or tear down of the facility and return of the underlying land to a state in which it can be put to another use. The costs and revenues related to disposal include:

- Brokers fees
- Advertising
- Demolition (where appropriate)
- Sales proceeds

The life cycle cost model assumes the facility has a residual value (a negative cost) that is based on this disposal calculation, even though actual disposal may not occur at the end of the planning horizon. The residual value is calculated as the inflated price of the land plus an inflated and depreciated value of the building.

The costs incurred during the acquisition phase are primarily non-recurring. Cost during the operation phase is primarily recurring. Thus, **as long as the operational costs are less in one alternative v. another, the longer the evaluation period the better that alternative appears relative to the higher operational cost alternative.**

Alternative Selection Criteria. Selection of a preferred alternative requires the use of criteria. The primary criterion relates to the long term financial interests of the state. This is based on the assumption that available capital will be allocated to provide maximum monetary return. Often though, there may be other organizational objectives (e.g., meeting a minimum quality standard for space, providing space for public gatherings, etc.) that the state would like to achieve with its decision, and these should be considered and given weight in the selection of an alternative.

Cost elements

The following are the life cycle cost model components the LBC recommended in their 1995 study:

Initial Costs. These costs include the cost of site acquisition, construction or acquisition of site infrastructure and buildings, equipment and move-in costs.

Other One-Time Costs. Evaluation of the space acquisition might include other one-time costs. Examples are the rental of some transitional warehouse space, double rent payments or financing pre-payment penalty clauses.

Operating and Maintenance Costs. These costs include janitorial, utilities, supplies, routine maintenance, and property management.

Property Tax. An imputed property tax is included in the economic costs since the nonpayment of taxes for public property results in reduced revenues, for public purposes, which would have otherwise been available with a private ownership, or results in a redistribution of taxes to Washington citizens (tax shift).

Periodic Replacement and Repair Costs. These costs are periodic costs that we can expect to incur with building ownership. Examples are recarpeting, repainting, light fixture replacement, replacement of HVAC or electrical systems, repair or replacement of walls, doors, and re-roofing.

Project Residuals. A new or fully renovated structure is assumed to have a 50-year useful economic life. Depreciation in value is assumed to occur on a straight-line basis of 2 percent per year. Land does not depreciate. The remaining value of the building appreciates with escalation. Land is assumed to escalate at inflation plus 1.5 percent.

Tenant Improvements. Programmatic tenant improvements are not included in the cost analyses except to the extent they are included in initial cost.¹

Leasing Payments. These costs include full payment for the cost of the facility.

Other Ongoing Lease Impacts and Lease Equivalent Costs. Include GA property management charges and an allowance for periodic moving costs in excess of those in owned space.

Because cash flows and costs differ over time their prospective benefits and costs need to be converted to an equivalent economic base, with the time value of money taken into consideration. A discount formula is needed to perform this conversion process.

Net Present Value analysis and the discount rate

In order to maximize the benefit to the state, the analysis must accurately change the resource inputs into outputs. This involves the interrelationship of staffing, material, facilities, operations, structure, financing, the utilization of funds, and the costs of such utilization. The discount rate is one part of an evaluation process to indicate whether a project is desirable. In most cases the project decision should be based primarily on the need and economic return. *This report's primary focus is on the economic evaluation of the project, not on needs analysis.* Needs must be addressed through a facility planning process.

¹ Since the issuance of this report these costs are now included in the LCC analysis.
Report No. 3 – Health, Transportation Agencies and Legislative Building Project Summaries

Without recognition of a *time value for money*, an early expenditure of \$1,000 would be weighted exactly the same as a \$1,000 expenditure in 20 years. Things that can be obtained immediately are considered more important than those that will be available at some time in the future. Another way to think of this is that there is a cost associated with having to wait for something. This cost has the effect of reducing the future value of that item. People generally prefer to receive a dollar now rather than later. Accordingly, the value of a dollar that is to be obtained at a future date must be reduced by some amount. Since that amount is determined by the degree to which people feel that a dollar today is worth more than a dollar tomorrow, the value of future dollars is said to be discounted. The further a dollar is in the future, the more heavily people tend to discount it. The net-present-value portion of the LCC analysis enables the state to adjust those future revenues and expenditures, making them comparable, thereby making projects comparable with standards and with each other.

One reason a dollar today is not worth the same as the dollar tomorrow is that money has the capacity to earn interest. Thus, there are costs associated with obtaining, compensating, and using various sources of funds that must also be considered – the interest the user must pay.

At any one time, the state might be utilizing funds from a variety of sources. Fortunately, the cost of borrowing from an outside source can readily be determined. Debt arrangements carry stated interest provisions that call for interest payments during the debt period, at its end, or as an advance deduction or cost. The specific cost of debt is simply the direct cost of this interest commitment. However, not all financing of projects will be via debt. Plus, the cost of debt is just one of the costs in a project.

So far, the discount rate can impact the alternative-selection decision in two ways: as a discounting vehicle over time and as a real cost of borrowing funds. But, a broader discount rate, which is intended to measure the economic desirability of a project, entails:

- A measure for borrowing;
- Compensation for both the specific risk of the project; and
- Allowance for the opportunity loss of foregoing the returns from alternative uses of the funds.

In order to make quality decisions, the economic return to the state from an investment needs to be higher than the cost of the inputs (e.g. staffing, material, etc.). But besides the pure costs and benefits of a specific project, there are other projects and processes competing for the state's limited resources.

When funds are borrowed for the prospect of gain (either in added revenue or future reduction to costs) it leads to another consideration – the earning power of money. To account properly for the time value of money in equivalence calculation, it is important that both the earning power of money and its purchasing power be reflected properly.

If funds are borrowed, then actual interest charges are incurred. But, even if funds are available (don't need to be borrowed), then the interest inferred should be based on the foregone opportunity cost of not investing those funds and **earning** interest over time.

As the foregoing indicates *a major problem with conducting LCC analysis is deciding what discount rate to use and assessing the stability of this rate over the life of the project*. How then does the state establish a discount rate? And moreover, what factors ought to be included in such a discount rate?

Calculating a Discount Rate

As indicated earlier, the discount rate to be used by the state needs to recognize not only the financing costs, but also should reflect other factors which might have a bearing on costs and revenues.

There are four major factors that contribute to what discount rate to use, and ought to therefore be analyzed, and handled as independent variables in any analysis. These four factors are: cost of borrowing, risk, inflation, and opportunity cost.

1. **Cost of Borrowing.** This is the sum of interest payments, any discounts on the face value of the debt, the cost of any bond sales, and any other costs associated with payment to others to use funds. Because money can earn at a certain interest rate through its investment for a period of time, a dollar to be received at some future date is not worth as much as a dollar in hand at present. This relationship between interest and time leads to the concept of the time value of money. This time value is what has been termed the real interest rate.
2. **Risk.** Any future investment always contains some element of risk. The discount rate can not only allow for the cost of borrowing, but may also adjust for the risk of errors in assumptions and outcomes. The conventional methodology for handling such risk is to add a 'risk discount rate'. Using this method, the riskier the project the higher the discount rate ought to be to allow for the possibility that the anticipated occurrences won't happen.
3. **Inflation.** Money also has a time value because the purchasing power of a dollar changes through time. There has been a historical trend for prices to increase. This means that it will take more dollars in the future to buy today's level of goods. This effect is called inflation (and while deflation is possible, it is not common). During periods of inflation, the amount of goods that can be bought for a particular amount of money decreases as the time of purchase occurs further out in the future. When economic analysis is to be conducted using projected dollar amounts, the discount rate may be adjusted to take the existence of inflation into account.
4. **Opportunity cost.** Another element in the discount rate is the *opportunity cost* of the debt. The opportunity cost recognizes the fact that the availability of funds is finite. Being a finite resource, debt must be allocated among competing demands. One opportunity is to invest available funds in a secure interest-bearing account. A dollar today can be invested and therefore earn interest. Another opportunity discount rate is the average debt interest rate on existing debts. Even a minimum risk investment must yield a return greater than the highest interest rate the state is charged on its existing debts; otherwise, it makes more sense to divert funds toward debt retirement in anticipation of more rewarding future investment opportunities. If the dollar isn't invested or the debt isn't paid, then that is a foregone opportunity. The interest earnings or savings foregone are the opportunity costs of the chosen investment.

Thus, in theory one method to calculate a discount rate is the average of the opportunity cost, the cost to borrow at the market rate, a risk adjustment factor (unless sensitivity or risk analysis adjustments are made), and a factor for inflation over and above the inflation estimate inherent in the cost of borrowing.

In calculating a discount rate it must be recognized that the cost of borrowing already includes a factor for inflation and risk for the lender. Recently, the real interest rate (Treasury bill rate minus inflation) has been approximately 3 ½ percent. For example, if anticipated inflation over the life of borrowing by the US Government is estimated at 2 ½ percent, the *risk free* interest rate (e.g., US Savings Bonds) would be six percent.²

The cost of borrowing for the state is greater than the *risk free* cost of borrowing since the state is not a *risk free* borrower.³ The rate of a risky investment will generally be greater than the rate for the less risky investment (all other variables being equal). One method to approximate the risk adjustment for state investments by comparing historic state bond rates with the standard of US Savings Bonds. A preliminary analysis (comparing the face value of the state bond with the rate of US Savings Bonds during the same year) of the last ten years of state bond sales indicates a 0.3% risk adjustment for state bonds when compared with US Savings Bonds. (See Endnote #2 for the formulas on calculating a discount rate).

² The recent real rate is higher than the two- percent rate for most of the century because investors continue to be concerned with the possibility of future high inflation

³ There are no risk free investments. It is commonly accepted that securities backed by the United States are the most risk free.

There are *other elements of project risk*, which are not embedded in the borrowing rate, which must be factored into the discount rate. These risk factors are related to *length of time funds will be borrowed, estimates of costs or revenues, the quality of the estimations* (including general inflation), and the *likelihood of a change outside the control of the forecast*. These factors are affected by the project life, because the further into the future these forecasts are for, the more likelihood of error and the more likely the errors will be compounded or amplified by ensuing times.

One of the major aspects of riskiness embedded in the borrowing rate is the length of time for which the funds will be borrowed. If the loan is for one year, the interest rate will normally be less than would the interest rate on a ten-year loan (there of course are variations on this rule because of the effect of inflationary expectations). Additionally, if the investment itself is considered risky, or if the investing public perceives a possible upward change in inflation, then an additional risk adjustment will be needed.

But, beyond the uncertainties involved with the investment (which the bond purchasers factor in) there are uncertainties inherent in assessing specialized projects, such as real-estate purchases, complex leasing proposals, construction programs, and other uniquely structured cash-flow proposals. This risk factor is a *project-cost factor*.

Such a risk adjustment can be made using the discount rate. A better method is to factor in risk information via sensitivity analysis or risk analysis of the various assumptions (e.g., cost of maintenance, cost of utilities, etc.). Using this method, one analyzes the means and standard deviations of the expected costs and revenues and assigns a risk factor according to the standard deviations. The risk factors are multiplied times the expected outcome value. Then all the products are added to generate a *risk weighted outcome value*.

However, if the *project cost factors* risk adjustment is to be made using the discount rate the process is slightly different. To calculate the discount rate adjustment, the first step is the analysis of means and standard deviations for each factor as done in the risk analysis above. These risk-adjusted means are then added together. The product is divided by the most likely outcome (the cost factor having the highest weight) to derive a discount rate multiplier.

One issue raised by the development community is whether it is appropriate to discount public investments at the same rate as private investments. They have indicated that the private discount rate is about twelve percent, whereas the state has been using a rate of about seven percent.

There are several opinions on this issue. The first is that risk should be discounted in the same way for public investments as it is for private investments. However, the risk for the public sector, especially for a state occupied building, is less than for the private sector-developer who may not be sure the building will be occupied throughout the term of ownership. It is argued that although the state cost of capital is low, the discount rate should be reflective of the citizens' opportunity cost of money. This argument assumes that the state borrowing takes resources from the citizenry. This is not true; the state borrows funds from the marketplace.

Other Accepted Ways To Compare Alternatives

There are alternatives to the LBC-recommended Net-Present-Value (NPV) method of comparing alternatives. The following is a discussion of the relative strengths and weaknesses of the Net Present Value and four other alternatives:

- Net Present Value.
- Breakeven Analysis.
- Discounted Payback.
- Internal Rate of Return.
- Profitability Index.

The NPV method is based on the concept of equivalent worth of all cash flows relative to the present. The Internal Rate of Return method solves for the interest rate that equates the equivalent worth of an alternatives cash inflows (receipts or savings) to the equivalent worth of cash outflows (investments). The Discounted Payback Period method doesn't reflect the profitability of a proposed alternative. The Discounted Payback Period method mainly indicates the project's liquidity rather than its profitability. The Profitability Index adjusts the Net Present Value for capital rationing purposes.

Net Present Value

The discount rate facilitates analysis by the NPV method. Using NPV analysis, the costs and revenues in any given year are multiplied times a NPV multiplier (based on the discount rate) which adjusts the dollar amounts to current time. Thus, costs and revenues that occur far in the future have less impact on the NPV than do costs and revenues earlier in the life of the project. The NPV multiplier table is available for a series of discount rates in most management finance books and books of mathematical tables. The formula for the NPV multiplier (used to convert a future sum of money into its equivalent present value) is:

$$\text{NPV Multiplier} = \frac{1}{(1 + i)^n}$$

Where:

i = Discount Rate
 n = Number of Project Years (number of interest periods)

Break-even analysis

Break-even analysis is commonly utilized when the selection among alternatives is heavily dependent on a single parameter that is uncertain. A break-even point for the factor is determined such that two alternatives are equally desirable from an economic standpoint. It is then possible to choose between the alternatives by estimating the most likely value of the uncertain factor and comparing this estimate to the break-even value.

Generally, break-even analysis entails the comparison of cash flows over time. Based on the assumed cash flows the two alternatives are compared over time until the cumulative cash flows are the same. A shorter break-even point indicates that an alternative has less risk.

Discounted Payback Period (DPP)

Often a proposed project can be evaluated in terms of how long it will take the investment to pay for itself from benefits, revenues and savings. Projects that tend to pay for themselves quickly are desirable because there is less uncertainty with estimates of short duration.

The payback period is the amount of time required for the difference in the present equivalent of receipts (savings) to equal the present equivalent of the disbursements (costs).

The normal Payback Period does not use discounted cash flows in its calculation. The normal Payback Period calculation is to annually subtract the cash inflows from the initial investment until the initial investment is *Paid Back*. The number of years it takes to pay-off the initial investment is the Payback Period. But, with its arbitrary cutoff date and its blindness to cash flows after the cutoff, it can lead to some faulty decisions if it is used too literally. Nevertheless, because it is so simple, it can be used as a screen for making preliminary investment decisions.

In this version of the Payback Period, instead of seeing how many years it takes for the cash flows to catch up with the initial investment, the cash flows are discounted at the discount rate. Then it is determined how long it takes for the discounted cash flows to equal the initial investment.

The DPP is an especially useful tool when the revenues and expenditures related to the out years of a project are uncertain. After a payback period, the uncertainty for some projects may be so great that requiring recovery of capital within the payback period is a justifiable means of avoiding undue risks.

Internal Rate of Return

Another method of adjusting for the impact of time is the Internal Rate of Return (IRR). The IRR is the rate that discounts a project's cash flow to a NPV of zero.

The basic rationale behind the IRR is that it tries to find a single number that summarizes the merits of a project and that doesn't depend on the interest rate that prevails in the capital market. Thus, there is no need to calculate the discount rate using complex (and possibly inaccurate) formulas and assumptions. That is why it is called the Internal Rate of Return; the number is internal or intrinsic to the project and doesn't depend on anything except the cash flows of the project.

The IRR does fill a need that the NPV does not. It is a rule that summarizes the information about a project in a single rate of return and doesn't require one to look at the market for the opportunity cost of using capital, that is, the discount rate. The IRR also provides a simple way of communicating about multiple projects being considered.

However, the IRR doesn't recognize the discount rate the same way as does the NPV method. The accuracy of the IRR as a predicator of the quality of projects, when cash flows are both positive and negative is suspect.

Profitability Index

Another method that is used to evaluate projects is called the Profitability Index (PI). It is the ratio of the present value of the future expected cash flows divided by the initial investment.

In the case of capital rationing, the profitability index is a useful way of deciding which projects give the most bang for the buck when resources are limited. The PI is equal to the NPV of a project divided by the projects initial investment.

Sensitivity Analysis Process

The LBC report stated that the life cycle process should include a sensitivity analysis process. They said:

- Sensitivity analysis show how changes in assumptions will effect the outcome of the analysis.

Sensitivity analysis is one method for testing the impact that changes in assumptions will have on the alternatives. In the comparison of alternatives it is possible to hold all assumptions constant but one. Then to range that one variable until the alternatives have the same Internal Rate of Return. Then the decision-maker can test for the reasonableness of achieving this alternative. A more complex analysis might include the varying of multiple assumptions.

Sensitivity analysis can also answer the question: *what is the amount of change in a particular factor that will cause a reversal in preference for an alternative and what is the behavior of the measure of merit to changes in each individual factor.*

There is usually little assurance that predicted futures will coincide with actual futures. The physical and economic elements on which a course of action depends may vary from their estimated values because of chance causes. Not only are the estimates of future cost problematical, but, in addition, the anticipated future worth of most ventures is known only with a degree of assurance. Looking at comparisons of projects using multiple variable analysis (sensitivity analysis) enhances the value of the LCC analysis.

Decision making under risk occurs when the decision-maker does not suppress acknowledged ignorance about the future, but makes it explicit through the assignment of probabilities. Such probabilities may be based on experimental evidence, subjective judgment or expert opinion.

Several factors can have an effect on the quality of a LCC forecast. By definition, a LCC analysis looks at future costs and revenues. The accuracy of future cost and income figures is difficult to determine (e.g., in times of unstable inflation, where the office space market is unstable, etc.). Most of the time the state has little control over these future costs and revenues; other future events are more likely to effect the outcome of these future costs and revenues than is the present state of affairs. There is an attempt to limit the variability between forecasted and actual outcomes by improving the forecast accuracy. An attempt is often made to improve the accuracy of these forecasts by gathering quality historical and trend information. If quality information is available regarding the items of income and expense, the resulting accuracy should be better than if the information is shoddy. If they are based on a considerable amount of past experience or have been determined by adequate surveys, a fair degree of reliance may be placed on them.

But, a second key factor affecting uncertainty is the project itself. Some types of structures have rather definite economic lives and residual values – some are more variable and dependent on other variables such as maintenance.

A third variability factor is the length of the assumed study period. The conditions that have been assumed in regard to income and expense must exist throughout the study period in order to obtain a satisfactory return on the investment. A long study period naturally decreases the probability of all the factors turning out as estimated. Therefore, a long study period, all else being equal, always increases the uncertainty in an investment.

Endnote #1

Steps in Life-Cycle-Cost Analysis

The following are the steps used in the LCC:

1. Define objectives or problems.

Define the problem and describe the approach to be followed in resolving the problem. Objectives (in terms of return or allowable differences) need to be defined at this stage. If objectives are defined later, there is the danger of defining the objectives in terms of already known results.

2. Identify alternatives.

Implicit in the use of life cycle analysis is the existence of more than one alternative.⁴ Characteristics, costs, and relationships identify the feasible alternatives. Critical in the accomplishment of any LCC analysis are the identification of feasible alternatives and the projection of each selected alternative in the context of the entire life cycle.

3. Select and Value Assumptions.

This is the area where the most conflict often occurs. The choice of assumptions by which to judge alternative designs, systems and projects is one of the most important tasks in the life cycle decision analysis. The most important task, of course, is to identify feasible alternatives from which to select. But, once the alternatives are identified the selection and valuing of assumptions has the greatest effect on the outcomes of the analysis. The final list of assumptions, both monetary and non-monetary, is therefore heavily influenced by the decision problem at hand as well as an intuitive feel for which attributes will or will not pinpoint relevant differences among feasible alternatives.

If too many assumptions are chosen, the analysis will become unwieldy and difficult to manage. Too few assumptions, on the other hand, will limit discrimination among alternatives. Again, judgment is required to decide what number is “too few” or “too many.” The following are some criteria that can be used to select assumptions:

- Each assumption distinguishes at least two alternatives - in no case should identical values for an assumption apply to all alternatives.
- Each assumption captures a unique dimension or facet of the decision problem (i.e., assumptions are independent and non-redundant).
- All assumptions, in a collective sense, are assumed to be sufficient for purposes of selecting the best alternative.
- Differences in values assigned to each assumption are presumed to be meaningful in distinguishing among feasible alternatives.

4. Assess cost and benefits.

All factors are expressed as financial costs. Costs have positive values and income and savings (e.g., leases to non-state agencies, reductions in FTE staff, etc.) have negative values. Only significant, differential costs need to be considered in distinguishing between alternatives. The assessment of costs and benefits might include risk analysis methods as outlined later in this paper.

The process of discounting is used to compare cash flows that occur in different amounts at different points in time. Whichever method is used will result in numerical comparisons of alternatives. These comparable figures will be the primary factor against which these projects will be compared against each other and against the objectives outlined in task number one. A number of cost and structural classifications serve as a basis for LCC analysis. As concepts, these classifications are useful in calling to mind the source and effect of costs that will have a bearing on the acquisition.

⁴ If there is only one alternative, another form of analysis (e.g., feasibility analysis, value engineering, etc.) is recommended.

Some of those classifications are as follows:

- Period of Analysis-treatment of cash flows during period of analysis when an option expires during the period.
- Square feet of facility
- FTE occupancy
- Inflation rates
 - Construction
 - Leases
 - Land
 - Existing building
 - On operating costs
- Initial Acquisition Cost
 - Land acquisition cost
 - New construction
 - Compare with existing housing arrangements
 - State directed
 - Privately directed
 - Tenant Improvements
 - Parking
 - Quality-How it effects the life of building
- Residual value
- Operating costs
 - Cost of private (i.e., privatization) v. public ownership or control
 - Treatment of other general operating costs (e.g., hazard insurance)
 - Relieving past liabilities (deferred maintenance, asbestos, etc.)
 - Capital Improvements
 - Maintenance
- Utilities (include heat, electricity, water, sewer, garbage, telephone, computer, etc.)
 - Custodial
 - Building management
- Financing Costs
 - Interest costs
 - Cost of issuance
 - Capitalization costs
 - Effect on other later issues - supply of capital
- Future rental rates -lease rate escalation as well as what vacant space can be leased for
- Discount rate (rate to use in comparing annual costs to current dollar equivalents)
- Vacancy rates and density of usage of space.

5. Evaluate alternatives.

Other non-quantified differences (e.g., convenience, appearance, more effective use of staff resources, etc.) should be noted. Only the economic factors relevant to these alternatives should be numerically compared. There is no explicit numeric mechanism for considering intangibles that may have a bearing on the decision. Thus, these intangible factors ought to be considered only after the LCC study is completed. The economic comparisons should be expressed in cash and also in equivalent, present-worth dollars. The process of discounting is used to compare the cash flows that occur in different amount at different points in time. The comparables (both quantified and non-quantified) should be arrayed side by side for comparison and evaluation purposes.

Alternatives should be compared insofar as possible when they produce similar results, serve the same purpose, or accomplish the same function.⁵ We should consider the comparison of alternative options by reducing them to an equivalent basis that is dependent on the interest rate, the amounts of money involved, the timing of the monetary receipts and/or distributions, and the manner in which the interest, or profit, on invested capital is repaid and the initial capital recovered.

6. Decide among alternatives.

Critical to the LCC analysis process is the decision-making step. At this stage the decision-maker must recognize that there are three general decisions.

1. Select one of the alternatives presented.
This doesn't mean decision is final. Further analysis is still needed (e.g., development of specifications, schematic design, etc.)
2. Reject all alternatives (often because they fail to meet objectives).
3. Change the projects so as to meet the objectives outline in task one.

⁵ If the status quo lease is for substandard space and the proposed new building will provide a substantial upgrade to space, these are not producing similar results.

Endnote #2

Formulas for Calculating Discount Rates

The following formula will generate a composite discount rate:

$$DR = \sum_{i=1}^n \frac{(CB + OC)}{2} + (RF) + (I)$$

where:

- DR = Discount rate
- CB = Cost of Borrowing
- OC = Opportunity cost (highest rate for risk free investment or loan payoff)
- RF = Risk Factor for investment (amount that is not embedded in cost of borrowing).
- I = Inflation Rate (amount that is not embedded in cost of borrowing).

For example a discount rate rate can be calculated at:

$$DR = \frac{(5.75\% + 8.0)}{2} + 0.3 + 0$$
$$DR = 7.175\%$$

This example assumes that the cost of borrowing and opportunity cost include all inflationary and investment risk adjustments.

Since the cost of borrowing has embedded certain risk and inflation factors, if pure risk and inflation factors are taken out (leaving the real interest rate) then the discount rate can be calculated as:

$$DR = \sum_{i=1}^n \frac{(RCB + OC)}{2} + (RF) + (I)$$

where:

- DR = Discount rate
- RCB = Historical *Real Cost of Borrowing*
- OC = Opportunity cost (highest rate for risk free investment or loan payoff)
- RF = Risk Factor for investment (historical difference between risk free interest rates and state bonds) for the term (years) proposed.
- I = Inflation Rate (CPI).

For example, assume the real interest rate has been 2 ½ %. Assume the risk factor for state investments has been 0.3%. Assume the average risk-free investment rate (less inflation) is 3.2%. Thus, if the inflation rate (risk adjusted for the term of the financing in question is 2 ½ %) the following is the calculation of the discount rate.

$$DR = \frac{2.5\% + 3.2\%}{2} + 0.3\% + 2.5\%$$
$$DR = 5.65\%$$

These examples indicate two different methodologies (with different assumptions) for calculating the discount rate.

PUBLIC WORKS PROCUREMENT METHODS FOR STATE OFFICE CONSTRUCTION

The state may choose to design and build state offices that it intends to own in one of three ways:

Design/Bid/Build is the traditional low-bid method most used in state public-works projects. It works as follows:

1. Agency selects an architect to design the project.
2. Architect designs the project and prepares bidding/construction documents consisting of plans and specifications. Design review is provided by the state, sometimes with the help of design-review committees.
3. Agency advertises for bids, making plans and specifications available to any interested party.
4. Contractors submit sealed bids on a provided form by a specified bidding deadline.
5. Agency opens bids publicly.
6. Agency awards a contract to the responsible bidding contractor who submits the lowest responsive bid ("Responsive bid" means the bidder correctly provided all the information required on the bid form, signs it and provides required bid bond. "Responsible Contractor" is a more vague term as there is nothing in public-works law that defines "responsible.")
7. Contractor builds the project.

Design/Build is used for projects over \$10 million by UW, WSU, and GA. This was the method used when the state built the Labor and Industries, Natural Resources, and Ecology buildings in the early 1990's.

1. Agency prepares, or hires a consultant to prepare, a detailed written description of the project.
2. Agency advertises for statements of interest from firms that will both design and build the project.
3. Interested firms, usually a collaboration of a contractor and an architect, submit information regarding their experience with the design and construction of similar projects and credentials of staff to be assigned to the project.
4. Agency reviews submittals and selects the three to five most qualified firms as finalists.
5. Finalists develop schematic designs and cost estimates for the project based on details in the "Request for Proposal" and submit them in separate sealed envelopes by a deadline. In most instances the finalists are paid a stipend or honorarium for their efforts if they aren't awarded the project.
6. Design submittals are reviewed and scored by agency for technical and aesthetic merit before cost proposal envelopes are opened. Sometimes the identity of the proposer is kept anonymous.
7. Cost proposals are opened, scored and combined with technical and aesthetic scores to determine winning proposal. An independent jury is often used to make the final selection.
8. Winning firm proceeds with design development and construction documents with continuous review by agency to assure compliance with original Request for Proposal requirements and commitments made in the proposal.
9. Construction proceeds.

General Contractor/ Construction Manager (GC/CM) is used for projects over \$10 million by UW, WSU, and GA.

1. Agency selects an architect.
2. Architect begins schematic design of the project.
3. Agency advertises for statements of interest from GC/CM firms.
4. In a two-step process consisting of short listing and an interview of finalists, applicants are scored based on project criteria for experience, qualification of assigned personnel, management approach, and references. Selected finalists submit proposals for a fee for the management of the project and the cost of specified general conditions.
5. Scores for original submittal and interview are combined with scoring of cost proposal to determine winning firm. The best timing is for this selection to occur near the end of the schematic design.
6. Architect and GC/CM work together to refine the design and cost estimates until GC/CM is confident that project work can be completed within a agreed upon budget.
7. GC/CM then agrees to construct the project within a Guaranteed Construction Cost. This guarantee is applicable to events within the control of the GC/CM described in the construction contract.
8. All items of work are bid publicly and awarded to the low responsive and responsible bidder. The GC/CM may bid on some portion of the work.
9. Construction proceeds.

LEASING AND OWNERSHIP CONSIDERATIONS

Background.

To buy or lease? It's an increasingly common question among agencies when faced with the need to move because they have outgrown their present space or it is operationally inadequate.

The "buy or lease" question is almost never a simple one to answer. Experts say choosing the best course of action means considering a number of interrelated factors beyond short-term financial considerations, especially the agency's strategic business goals and objectives. But the decision is often most affected by what happens to their budget and in turn their operations. The result is often ad hoc decision making without a strategic business or service delivery context.

Forty years ago it was much more common for the state to own its office space. Even when the 1991 Master Plan was adopted, ownership was more common. But in today's environment of rapid change and tight budgets, agencies prefer flexibility. In many cases, that means leasing rather than owning. Under the right circumstances, leasing represents an opportunity to meet agencies' current needs and preserve flexibility for future deployment of the state's limited capital. But what are the right circumstances? And what factors should be considered in making the decision?

After personnel, office space is typically one of the agency's largest budget items. In an era of limited budgets, agencies are looking for ways to minimize current expenses, even at the expense of higher future costs. The state has pursued co-location, telecommuting, and parking restrictions all in an effort to reduce occupancy costs.

The three most important questions in the buy vs. lease analysis are:

- What level of control do you need or want?
- What are the budget impact, cash flow, net present value and financing aspects of the alternatives?
- How important is flexibility?

What is a building lease?

Whether it's a gross or net lease for a warehouse or office use, a lease is a contract or long-term agreement to rent buildings. In return for most, but not all, of the benefits of ownership, the user (lessee) makes periodic payments to the owner of the asset (lessor). The lease payment covers the original cost of the building and provides the lessor a profit. There are three major kinds of leases for the state: the pure lease and two types of lease with ownership options.

Pure leases are most common. (by far). A pure lease is usually written for a five or ten year term. With a pure lease:

- Periodic payments (usually monthly) are made.
- Possession of the building reverts to the lessor at the end of the lease term.
- The lease is not cancelable and the lessee has a legal obligation to continue payments to the end of the term.

Some leases are described as "triple net" leases. Under a triple net lease, the lessee is responsible for all operating expenses such as those for maintenance, taxes, and insurance. The lessor pays these expenses under a pure lease.

Less common for the state are leases with an option to buy and lease purchases. The lease with an option to buy is a lease that includes a clause allowing the state to purchase the property at predetermined dates during the lease for a predetermined "market price." A lease purchase is a lease that contains a clause that ownership of the property will revert to the state at the end of the lease term – usually for a nominal payment (e.g., ten dollars).

There are undeniably many instances in which leasing offers the only practical means of obtaining the use of an office. An example of this would be the leasing of offices that are needed for only a short period of time. Another would be the leasing of office space in high cost urban downtown areas, where the ownership of an entire building would be impractical.

The cash-flow patterns of the operation, interest rates, degree of financial leverage, long-term business strategies, and the asset itself are all key factors to consider. The agency's long-term strategic plans and cash position obviously play an important role in the lease/buy decision. An agency that anticipates growing over the next 10 years that has strong budget bases may be more inclined to purchase. The next section will explore the benefits the state might experience by pursuing a leasing strategy.

Benefits of Leasing

One of the most important reasons the state will choose to lease a property is for financial reasons. The rationale most frequently heard is that leasing frees budget dollars for direct program needs. There are many variations on this basic theme, but the line of reasoning generally is somewhat as follows: by leasing office space, an agency can make the funds which would otherwise be tied up in those assets available for alternative purposes – most often mission services.

Analyzing the financial ramifications of a potential lease means answering the question: *Will it cost the agency more or less to lease than to buy outright?* Using the JLARC-model method involves calculating the net present value of the cash outlay over the term of the lease and comparing this number to the cost of borrowing to purchase the asset. Net present value is the total of the cash flow involved in the transaction, discounted to today's dollars.

Financing Considerations

The important question is the **cost** of leasing relative to other financing alternatives. Is capital in a very short supply? Can we use our available bond capacity better if it is not tied up in a building? What return can we expect from our bond funds if they are invested elsewhere? If capital is tight, leasing may be preferable.

Lease financing should be utilized whenever it can be justified when compared to other debt financing alternatives. This means that it must either: offer cost savings over direct borrowing; it must be available where an equivalent amount of debt financing is not available; or it must offer some offsetting advantage which in the opinion of management justifies its higher cost.

A lease may be better than a purchase from a **cash flow** perspective. This is because up-front outlays associated with a lease are usually less than those required with a property purchase. This is especially true with limited capital availability because of the statutory debt limit. If the agency operates within set budget allocations, a lease payment may be one way of obtaining the office space within existing resources now, when it is needed, while staying within budget limits.

We frequently hear that leasing makes it possible to pay for an asset as it is used. This is true, but by no means unique. The pay-as-you-go feature is characteristic of all credit arrangements. The real question is which alternative offers the greatest cash flow and net present value advantages.

The obvious advantage to leasing is acquiring the use of an asset without making a **large initial cash outlay** or tying up **bond financing capacity**. Compare borrowing to purchasing the same building, a lease usually requires no restriction on the state's financial operations while borrowing does. This generally results in lower initial overall costs than does bond financing, and provides protections against the **risk of operational or functional obsolescence** since the lessee can vacate the building at the end of the lease.

Another claim made for leasing is that it offers a **hedge against inflation**. You get the asset today and pay for it with depreciated dollars in the future. This again is true of all types of debt financing, not just leasing. Furthermore, leasing suffers in comparison with direct borrowing in that the agency does not own the asset after it has finished paying for it. With the prospect of continued inflation, the loss of **residual values** may prove a substantial disadvantage to agencies leasing their assets.

Can we secure a favorable lease from the owner of the building with an option to purchase?

Because of **tax considerations**, a property owner may prefer to lease his property rather than sell it. In such a case, the lease price may be more attractive than the selling price.

Although an agency may find a facility that meets its needs, the real estate values in the area may be stagnate if the facility is in an area of declining real-estate values. In this case, leasing makes sense – let the landlord suffer the effect of the declining values, not you!

How does **location** affect the buy-or-lease decision? Economic conditions are a factor in determining the **level of risk** in underwriting a particular development or acquisition of property based on **supply and demand**. Clearly, overheated building costs and low vacancy rates can increase lease costs in an area. That should make ownership a more attractive option. Conversely, if the area has excess office space, lease costs will be less and ownership is a less desirable comparative option.

In conclusion, there is an old cliché that goes something like this: "Buy what appreciates, lease what depreciates." Many large corporations live by this principle and keep investments that decline in value to a minimum. Almost all state real estate appreciates in value, however.

Property Management Considerations

While leasing rather than owning property is sometimes touted as a way to avoid maintenance expense and other responsibilities, it can be a double-edged sword. On the one hand, the agency is less responsible for keeping the roof in good condition; on the other hand, the agency is relying on the landlord and the quality of the lease to hold the landlord to certain maintenance criteria. That can be a good or bad situation. If you have a good landlord, there is less property management hassle. With staffs being stretched thin, some agencies are very happy to hand over that assignment to a good landlord. With a bad landlord, sometimes the only option is to move out. This is always costly.

Facility Use Considerations

Leasing reduces the burden of **obsolescence**. Agencies that opt to buy a facility rather than leasing are risking obsolescence or a lack of future need. To have an office sit vacant because it is no longer needed is a huge expense. It also sends the message that the state didn't make a good decision. That underscores the importance of having a lot of flexibility built into an owned building. Are our requirements going to change rapidly over the next few years? If they are, we should probably consider leasing.

The agency needs to retain **mobility** — maybe the agency is not sure that the facility that is selected now will serve agency needs several years in the future. The agency may need more or less space, the customer base may move elsewhere, or better-suited properties may later be built.

Is the building one that will be readily resold? If so, to purchase may be wise. On the other hand, leasing may be better if there is something about the building (for example, little or no adjacent land for parking or office addition) that would limit **resale** of the property.

Other Considerations

Property that the state leases stays on the tax rolls whereas owned property is taken off the tax rolls. By maintaining the property on the tax rolls, other taxpayers within the jurisdiction pay lower overall taxes, since the property owner who is leasing to the state shares a portion of their tax burden. Those property taxes are passed along to state tenants, however.

Leasing has the further advantage that the leasing firm has acquired considerable knowledge about the building that it leases. The agency doesn't want to be responsible for **maintenance** duties — many leases place the duty of maintaining the property on the landlord. Usually, agencies don't want to become property experts — they want to maintain their focus on serving their customer.

Sometimes, **rapid growth** or other changing conditions dictates a quick decision to procure space. If lease space is currently available and it will take a number of years to build owned space, it makes sense to lease. Or a suitable property to buy may not be available — the agency may want to buy, but the only properties that would be suitable for agency needs are offered only on a lease basis. A variation of this is foreknowledge that a property that is more desirable might be available in the future.

Another criteria to weigh when deciding between lease vs. buy is the extent to which the agency is involved with **Federal grants and contracts**. By leasing space under leases tailored to the term of the grant, the agency can charge off the full cost of the space to the federal government. If it is owned, the federal rules on capital upgrades and operational costs are very restrictive.

In evaluating lease vs. buy decisions in an aggregate sense, the state needs to keep in mind the possibility that leasing can result in a loss of **legislative oversight/control** over major expenditures. Unless leasing is controlled at the operating level, the result may be that agency managers will be able to obtain assets through leasing for which they were denied appropriations in the capital budget. A corollary of this is that buying vs. leasing may result in distortions in the evaluation of interagency performance. To the extent that leased offices, which have an operational impact v. buying which has a capital impact, are used the comparison of programmatic costs between agencies can be distorted.

Benefits of Owning

The question of relative costs involves the consideration of many factors. Two that come to mind immediately will generally work to the disadvantage of leasing.

A lease may sometimes beat out a purchase in terms of cash flow in the early years. But over the long haul, a purchase is usually cheaper because a landlord, in addition to paying all of the costs associated with purchasing and maintaining the property, will attempt to build in a **profit**. This profit margin is commonly in the range of from four percent to six percent. Thus, over the life of the asset the cost of the lease will be greater than the cost of ownership. The other involves the disposition of the asset upon the termination of the lease. In the case of buying, at the end of year 25, you have the building and its **residual value** – what you can sell it for. Obviously, the economic value of the asset is lost at the end of the lease term, since the asset isn't owned. Lessees have been known to grossly underestimate the salvage value of an asset. If the asset reverts back to the lessor or if it must then be purchased, or if the lessee must continue to pay rent for it, this represents an added element of cost.

Another reason an agency might consider ownership is that it wants **control of the property** — maybe the agency intends to make substantial additions or renovations to the property. Or the agency may decide to change something about the way it does business that requires facility change. If an agency rents its office space, it may have to get the landlord's permission to make these changes. Also, if extensive **tenant improvements** are made the agency might lose those improvements when the lease is up, especially if the landlord raises lease rates substantially in awareness of the improvements.

The agency may not find a suitable property to lease — they may want to lease, but have found all properties that would be suitable for their needs have been offered only for sale, rather than lease. Likewise, if the agency wants to stay at the same location where a specific location is all-important. For instance, if the agency is uniquely located for its client base and transportation they may not want to lose it because of a rent escalation or because the landlord just wants the property for another use. If the agency owns the facility, they won't have these worries.

The proposed offices may be in an area of **appreciating land values** and if they need to relocate in that area it may be better to own the property (and thereby get the benefit of this appreciation if they sell) rather than to rent it. This is would be particularly true if the agency were able to spot this real-estate trend before prices jump up in recognition of it.

Another caveat for some is that while leasing typically offers more flexibility, a lot depends on the physical characteristics of the property. Sometimes if there are huge **barriers to moving**, then it typically makes more sense to own.

To some degree, the question of whether to commit capital to owning space is a function of the **cost of capital** — the cost of borrowing — plus the state's opportunity cost value the capital could have been put to in another use, plus an allowance for assumption of risk. Sensitivity comparisons indicate that the cost of capital can be the single most important factor that affects the buy or lease decision.

Options analysis

Lease versus purchase analysis is fundamentally a capital budgeting analysis. The relevant costs associated with leasing the office are compared to those for purchasing. These costs should be compared on an equal basis; thus all costs should be discounted at an appropriate rate. The discount rate used would normally be the cost of capital used to finance the asset.

The cost to purchase is the original price, less the present value of any salvage or resale value, plus the present value of operational costs (expenses coincident with ownership). Should the asset be purchased, the owner would need to pay maintenance, insurance, and capital replacement costs. The lease payment, however, may either include or exclude some of these costs. Only those cost differentials must be included in the calculations. To make the analysis, you must also make certain assumptions about the economic life of the facility, the salvage value, and depreciation.

This analysis compares the cost of each alternative by considering the timing of the payments, operational costs, the interest rate, the lease rate, and other financial arrangements. One of the factors complicating any financial comparison between leasing and purchasing costs is the fact that, *unlike mortgage rates, lease rates aren't fixed for the life of the asset.*

Conclusion

Overall, it seems that the best strategy is to maintain a mix of owned and leased facilities, depending on the agency's strategic goals and objectives. That mix should recognize that flexibility of use enables the greatest opportunity – whether the office is leased or owned.

PAYING FOR TENANT IMPROVEMENTS

Definition of Tenant Improvements:

Tenant Improvements are made to the interior leased premises at the request of the tenant. Generally, the improvements are made to new space but occasionally improvements are made to existing space in order to upgrade or modify it to better serve the tenant's needs.

Leased Space Requirements is a comprehensive technical specification that establishes the landlord's minimum quality standards for improvements. Examples of standard building items are type and style of doors, lineal feet of partitions, quantity of lights, quality of floor covering, etc. When the state requests that an item exceed the state's *Leased Space Requirements*, the state is responsible for paying anything in excess of the state's minimum quality standards. These items are called "additional tenant improvements".

To illustrate, Department of Information Services may require more than the minimum number of voice/data outlets per square foot required under the state's *Leased Space Requirements* because it has relatively greater information technology requirements.

Options for paying for additional Tenant Improvements:

Once an improvement cost is determined to be the state's responsibility, the requesting state agency is obligated to evaluate the feasibility of the additional cost. The requesting state agency has two options for paying for the excess additional tenant improvement since this additional tenant improvement cost does not fall under the negotiated base rental rate:

Make payment in cash upon satisfactory completion of the improvement; or

Amortize the total cost over a specified period of time (usually over the term of the lease) at an interest rate pre-negotiated approximately one to two percent above the prime lending rate (equivalent to about 4% above the state's borrowing rate). The average amortization interest rate currently is 10 percent. In the event a lease term exceeds five years, General Administration encourages the agency to complete the payments over the first five years to save money.

How much is the state spending on Tenant Improvements in Thurston County?

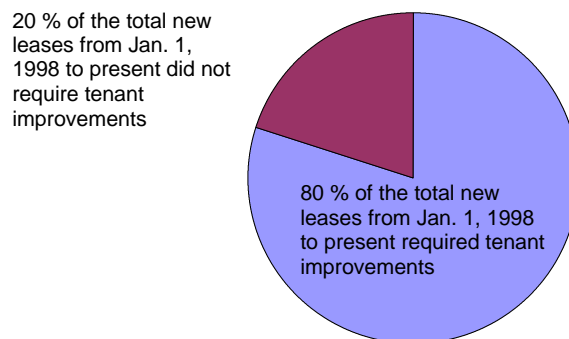
More than 100 agencies, boards and commissions lease 3,065,611 square feet of office space in Thurston County. Since January 1, 1998, Washington state has spent approximately \$2,781,000.00 on additional tenant improvements, paying cash for nearly half of that amount and amortizing the other half over a specific period of time, as illustrated on the next page.

Date	Agency	Sq. Ft.	TIs Paid in Cash	TIs Amortized	Interest Rate	Months Amortized	Monthly Payment	Description
04/01/98	REV	48,187	\$216,000.00	0	N/A	0	0	Remodel new office
01/01/98	SIB	17,850	\$36,122.18	0	N/A	0	0	Remodel office space
04/01/98	SHS	7,614	\$20,000.00	\$63,789.72	12%	36 Months	\$1,418.97	Upgrade office
07/01/98	ESD	43,000	\$5,902.00	0	N/A	0	0	Upgrade HVAC
04/01/99	DOT	6,000	\$17,292.96	0	N/A	0	0	Parking lot/lighting
04/01/99	DOT	5,727	\$1,490.00	0	N/A	0	0	Office upgrade
03/01/98	DOP	32,400	\$9,880.66	0	N/A	0	0	Office upgrade
06/01/99	DIS	12,748	\$1,684.80	0	N/A	0	0	Office upgrade
09/01/98	SHS	54,788	0	\$229,599.46	10%	60 Months	\$4,886.81	Office remodel
04/01/99	SHS	54,788	0	\$259,710.41	10%	60 Months	\$5,518.08	Office remodel
04/01/99	LCB	44,500	\$16,949.01	0	N/A	0	0	Office upgrade
06/01/99	SHS	70,000	0	\$712,957.29	10%	120 Months	\$9,421.78	Photo ID System, increase circuits, re-lights, security coverage, HVAC
10/01/99	ESD	17,643	0	\$6,924.15	10%	60 Months	\$147.12	Office upgrade
03/01/99	SHS	49,984	\$430,996.91	0	N/A	0	0	Office upgrade
02/01/99	DRS	57,441	\$290,695.26	\$203,982.00	10%	120 Months	\$2,695.64	Office upgrades
09/01/99	CTC	18,516	\$62,921.46	0	N/A	0	0	Office upgrades
04/01/99	OFM	23,940	\$41,434.20	0	N/A	0	0	Office upgrades
04/15/99	DOC	7,000	\$17,691.04	0	N/A	0	0	Alarm upgrade, remodel office
11/01/98	TSC	6,400	0	\$32,926.00	9.5%	60 Months	\$691.51	Office upgrades
04/01/98	SHS	9,025	\$20,000.00	\$69,643.00	11%	60 Months	\$1,514.21	Security system, duplex receptacles, upgrades
08/16/99	DOC	11,000	\$12,395.04	0	N/A	0	0	Office Upgrades

Total Square Feet548,567
 Total TIs Paid in Cash.....\$1,201,455.52
 Total TIs Amortized.....\$1,579,932.03
 Total Cost of TIs.....\$2,781,387.55

The chart below shows the percentage of all leases for **new** space since Jan. 1, 1998 to the present which included tenant improvements. Out of a total of fifty leases for new space, forty projects required tenant improvements.

Percentage of New Leases Requiring Tenant Improvements



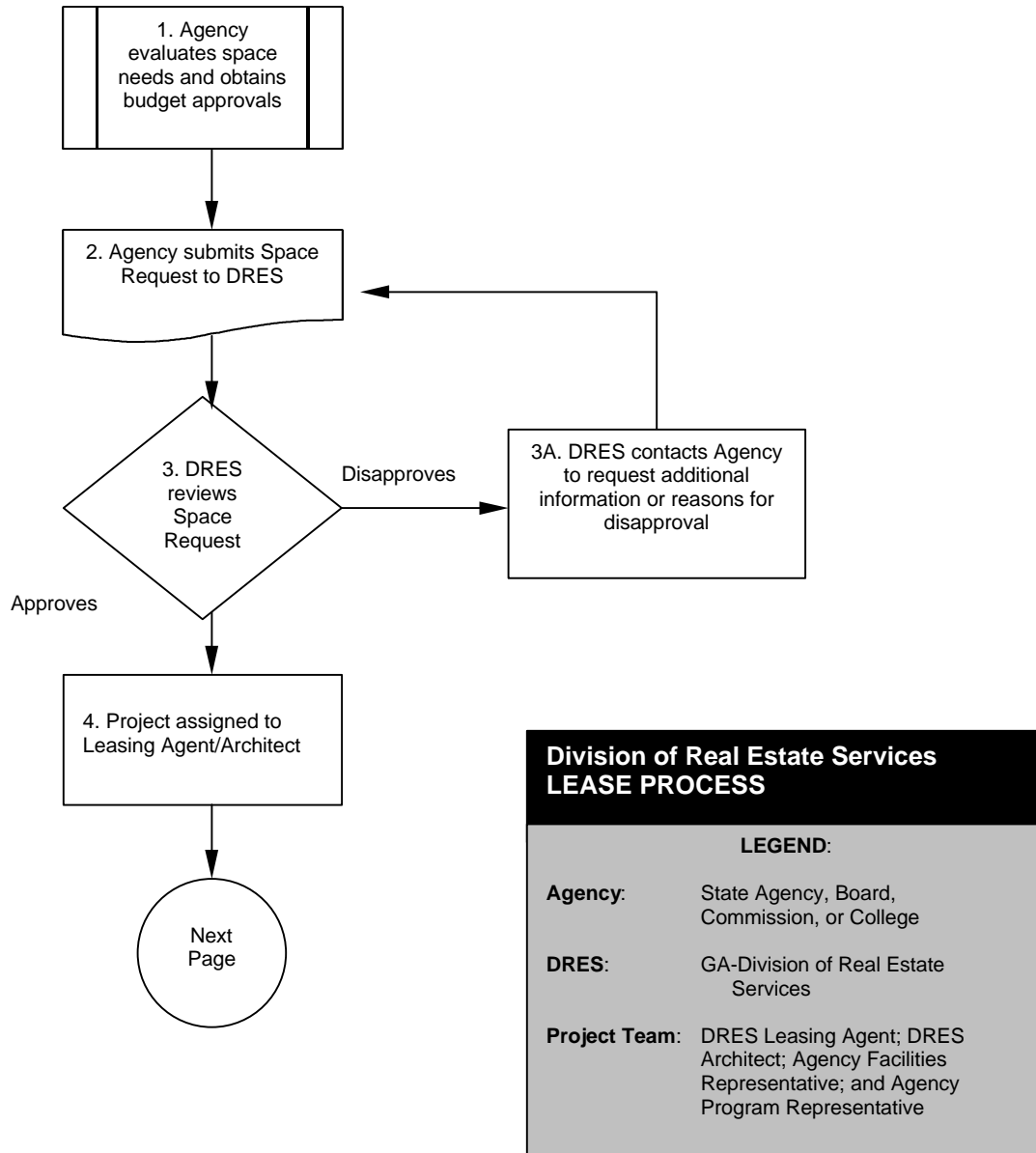
Market vs. TI impacts to Lease Rate Negotiations

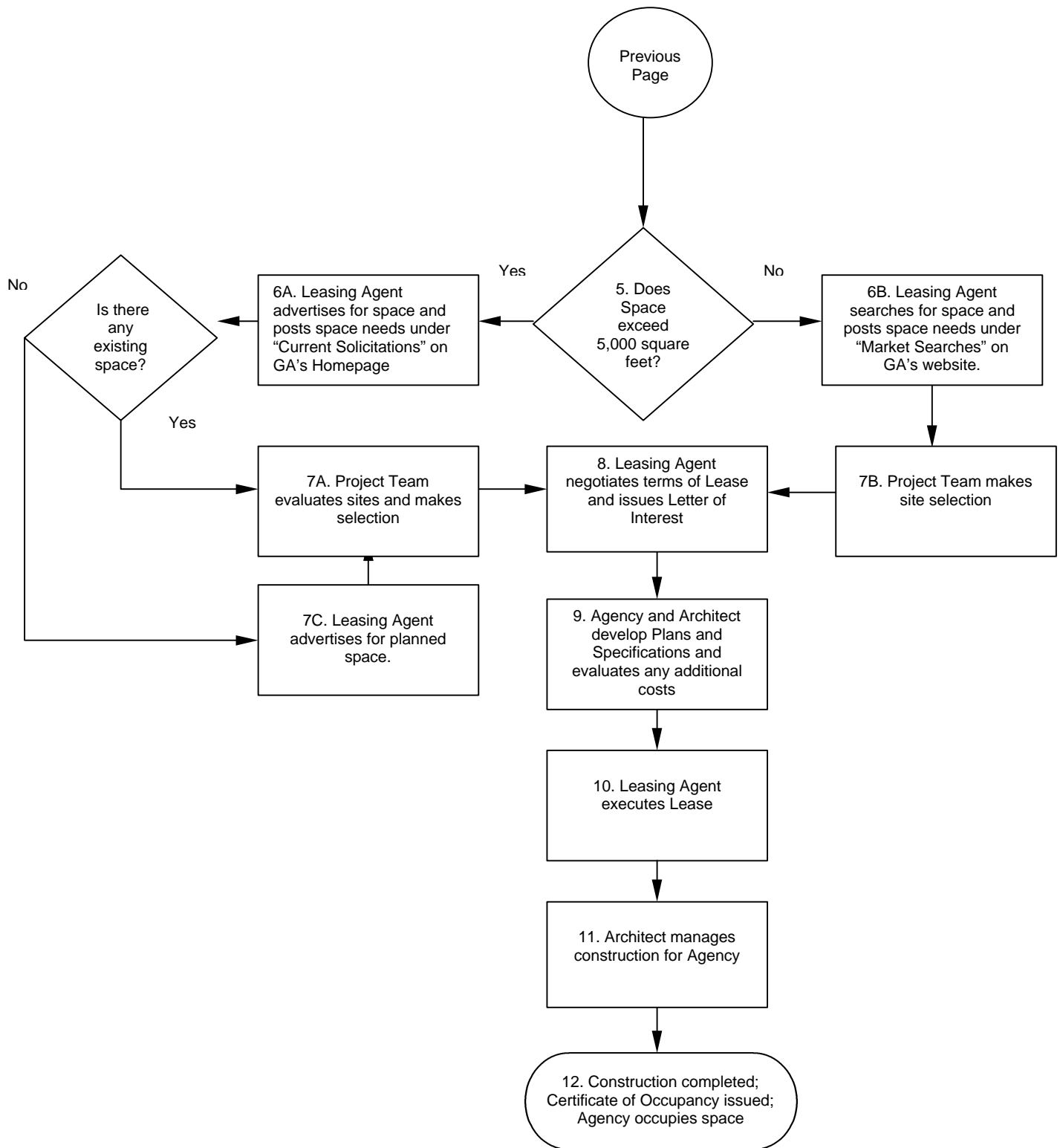
Typically, renewal rates are impacted by the growth of the market rates. If you have a sophisticated investor (landlord), he/she may assume the value of the prior TIs as gain in equity and capitalize that value as part of the opening renewal base rent. One could assume that the property owner in the latter case would have a stronger relative negotiating position (with regards to the opening renewal base rent). However, in most instances, the impact of the then present market rate upon renewals will have a greater impact. In any case, GA's leasing agents use "base lease rates" (which do not include amortized TI payments) as the beginning points for lease renewal negotiations.

THURSTON COUNTY LEASING PRACTICES

Lease Process

The following describes the lease process followed by the Department of General Administration, Division of Real Estate Services. The description is separated into two parts, consisting of a flow chart, and an expanded explanation of the flow chart with exhibits. Also included is an explanation of the proposed Preferred Leasing Policy for Thurston County.





Explanation of Lease Process

1. Agency evaluates space needs and obtains budget approvals

The submission of a *space request* (see attached exhibit “A”) to DRES is preceded by the emergence of a new space need. The most common reasons for requesting new space are program growth and consolidation. Agencies evaluate space needs by reviewing current and projected staffing levels, and programmatic functional requirements. This information is then converted to actual space requirements, such as square footage, location and type of space. The *space request* form provided by DRES has various worksheets to accomplish this task.

Agencies must also determine the budget impacts of moving to a new space. These can include increases in ongoing expenses, such as rent and utilities, and one-time expenses for moving, furniture, and equipment. Agencies must obtain all necessary budget approvals before submitting a *space request*. DRES requires agencies to sign a certification contained within the *space request* form, certifying that the requested space is necessary and funds are available to implement the request.

2. Agency submits space request to DRES

Agencies submit a completed *space request* to DRES. As a control measure, all *space requests* must be logged in at the front desk and forwarded to the Real Estate Group Manager for review. *Space requests* are then tracked through the review and approval process.

3. DRES reviews space request

The Real Estate Group Manager reviews *space requests*. The review begins with the statement of justification and alternatives considered, and then moves to the technical parts of the request covering location, lease terms, type of space, staffing levels and footage requirements. Opportunities for collocation, consolidation, and utilization of state-owned or leased space are also considered at this time.

3a. DRES contacts agency to request additional information or to explain reasons for disapproval

Additional justification and information may be requested if *space requests* are not complete or include unusual requirements (e.g. high number of conference or training rooms, unworkable geographic parameters).

4. Projects assigned to leasing agent/architect

Once approved, *space requests* are assigned to a DRES Leasing Agent and Architect. The DRES Leasing Agent and Architect then form a project team with an Agency facilities representative and program representative.

5. Does space exceed 5,000 square feet?

DRES' *Seeking Space to Lease* policy (see attached exhibit “B”) requires that all requests for space exceeding 5,000 square feet go through a formal advertisement/solicitation and evaluation process. Requests for 5,000 square feet or less may be satisfied by conducting a physical search of the market and no formal evaluation of alternatives is required (see Alternative Tracks below).

6a. Leasing agent advertises for space and posts space needs under “Current Solicitations” on GA’s website

DRES Leasing Agents write advertisements (see attached exhibit “C”), which include a description of the space need, evaluation criteria, and requirements for submitting proposals. Advertisements are posted on GA’s website. Summaries of advertisements are placed in the appropriate local newspapers and direct interested parties to obtain entire advertisements from GA’s Homepage. Building owners are normally given three weeks to respond to an advertisement. Proposals that are not received by specified closing dates or do not meet the minimum requirements of advertisements are rejected.

7. Project team evaluates sites and makes selection

The project team, consisting of a DRES leasing agent, DRES architect, Agency facilities representative and Agency program representative, conducts a formal evaluation of the proposals using criteria specified in the advertisement. The evaluation scoring is approximately weighted as follows: 1/3 for site/location, 1/3 for the building, and 1/3 for rental costs (see attached exhibit “D”). Each project team members’ raw scores are converted to rankings before the results are tallied to ensure equitable weighting. The building owner with the highest ranked proposal is selected as the “Apparent Successful Proposer”.

8. Leasing agent negotiates terms of lease and issues letter of interest

Leasing agents enter in to negotiations with the “Apparent Successful Proposer.” The terms and conditions under which the state will enter into a lease are memorialized in a letter of interest (see attached exhibit “E”). Terms and conditions include rental rates, build-out specifications, timelines for planning and construction, and standard lease language. All terms and conditions are subject to Agency written approval.

9. Agency and architect develop plans and specifications and evaluates any additional costs

The DRES Architect is responsible for and oversees the Project Design and Specifications. Most of the project preliminary designs are produced by planners within an agency or by private sector architects. The DRES Architect reviews the design while in process, recommends and oversees revisions and produces or manages the production of final documents. These documents are Design Development Drawings and Performance Specifications part of which serves as a space plan (see attached exhibit “F”). The Specifications include DRES Leased Space Requirements and any Agency Addenda.

The Architect sends these documents to the building owner for pricing. Costs are itemized on a Construction Bid Cost Breakdown sheet (see attached exhibit “G”). They are separated into Basic Requirements, which are delineated in the Leased Space Requirements and included in the lease rate, and Additional Tenant Improvements, which are paid for by the Tenant. The DRES Architect reviews the costs and negotiates a resolution to any discrepancies. The Construction Bid Cost Breakdown is signed by the building owner, Agency and Architect and, together with the Plans and Specifications, comprise the documents upon which the construction build-out is based on.

10. Leasing agent executes lease

Leasing agents write a lease agreement (see attached exhibit “H”) consistent with the terms and conditions described in the letter of interest. Plans and specifications for the build-out are attached to lease. The building owner and the state then execute the lease. All lease language is subject to approval by the Office of the Attorney General “As to Form.”

11. Architect manages construction for agency

DRES Architects issue a Notice to Proceed to commence the construction phase of the project. At the Pre-construction Meeting, the DRES Architect explains the process and requirements for product approvals, construction inspections, change orders, and project completion. Additional construction meetings are held as is prudent and necessary.

12. Construction completed; Certificate of Occupancy issued; Agency occupies space

The building owner notifies the DRES Architect when the project is complete, the building department has issued a Certificate of Occupancy and the project is ready for the agency to move in. The Architect inspects the project and verifies that the project is substantially complete and ready for the agency to occupy. A punch list is prepared and given to the building owner to complete. A cash retainer is then issued to the Lessor when the punch list has been satisfied and Prevailing Wage documentation is complete. The Agency then occupies the building and the lease commences.

Alternative Tracks

Market Searches

6b. Leasing agent searches for space and posts space needs under “Market Searches” on GA’s website

Leasing agents conduct a physical search of the market and contact building owners and real estate brokers. Space needs for 5,000 square feet or less are also posted on GA’s Homepage under

7b. Project team makes site selection

When a suitable space has been located, the project team makes the site selection in a cooperative manner. No formal site selection process is required. The project then proceeds to the negotiation phase described in #8.

Planned Space

7c. Leasing Agent advertises for planned space

As indicated in the attached “Seeking Space to Lease” policy, if an advertisement/solicitation produces no suitable proposals for existing space, the project team may seek space under construction or planned space. The Leasing Agent must obtain the DRES Assistant Director’s approval before proceeding on this track. Once approved, Leasing Agents advertise for space under construction and planned space in the same manner described in 6A and then proceed with the evaluation process described in 7A.

The definitions for existing space, space under construction, and planned space are as follows:

Existing Space: A building with footings, foundations, and roof in place.

Space Under Construction: A project with, at a minimum, a building permit, and a loan commitment or proof of funds necessary to complete the project. Proposer must control land through fee ownership or long-term lease.

Planned Space: A project with, at a minimum, final site plan approval from the controlling municipality, SEPA determination of non-significance (or mitigated determination of non-significance), and lender’s letter of credit or letter of interest. Proposer must control land through valid purchase or option contract, fee ownership, or long term lease.

THURSTON COUNTY PREFERRED LEASING POLICY

The proposed Preferred Leasing Policy (see attached exhibit I) was developed to provide clear direction on the leasing of state office space in Thurston County and is intended to be an addendum to The Master Plan for the State Capitol of 1991. This policy enhances the DRES standard leasing process to promote state office leasing in Preferred Leasing Areas (PLAs) as identified by the cities of Lacey, Olympia, and Tumwater. To accomplish this, the Preferred Leasing Policy specifies the following advertisement and site selection procedures for space requirements exceeding 5,000 square feet.

First, advertise for existing office space within the incorporated limits of Lacey, Olympia, and Tumwater, and for space under construction and planned space within the PLAs. Proposals will be considered in the following order: (a) existing office space in PLAs, (b) existing space within the incorporated limits of the cities of Lacey, Olympia, and Tumwater, (c) space under construction in PLAs, and (d) planned space in PLAs.

Second, advertise for space under construction, and planned space within the incorporated limits of Lacey, Olympia, and Tumwater. Proposals will be considered in the following order: (a) space under construction within the incorporated limits of the cities of Lacey, Olympia, and Tumwater, and (b) planned space within the incorporated limits of the cities of Lacey, Olympia, and Tumwater.

In order to discourage speculative construction, the proposed Preferred Leasing Policy further defines existing space as being previously occupied by the state or space within a building caused to be built by the state.

Section II. Study Plan Update

UPDATE ON COST PLANNING FACTORS

Report #2 summarized and compared preliminary project costs for a new Transportation Agencies building and for a Department of Health building. Estimates were based on a "level of quality" outline specification developed as part of a facility consolidation study prepared for the Department of Health by architects Brown Connally Rowan Akiyama (BCRA), and on specification considerations developed and coordinated by architects NBBJ during a feasibility study for the Transportation Agencies building. That performance specification is described in Report #2.

The costs estimated included the "hard" construction costs for the respective buildings, "hard" costs for site preparation, and the complete set of "soft" costs that accompany projects. Soft costs include design, other technical consulting, furnishings and equipment, permits, performance bonds, administration and planning, taxes, contingencies, and mitigation. Estimates were jointly developed by BCRA (for the Department of Health building), NBBJ (for the Transportation Agencies building), the respective owner agencies, and Engineering and Architectural Services, GA.

The "hard" costs for the buildings were estimated to be \$130 per square foot. This includes a 10% estimating contingency. The state will use this figure when estimating costs for 21st century building. The "soft" costs have been estimated to be about 37% of the total project cost for each project. These estimates can be considered to be accurate enough (considering the included contingency amounts) for budgeting purposes. Estimates were also compared with estimates using R.H.Means data for Western Washington, adjusted to Olympia.

There are still some budget uncertainties without a specific site or a completed pre-design. Mitigation costs will also vary depending on the site and the jurisdictions.

PRELIMINARY 10 YEAR EMPLOYMENT AND STAFF FORECASTS

Office space in Thurston County is highly dependent on two factors. One is the amount of office space per person, the other is the number of office workers. The state standard of office space per worker is between 187 and 251 rentable square feet per FTE. One recent representative construction program (Labor & Industries Building) was built to a standard of 216 rentable square feet per FTE.

Currently, in Thurston County there is approximately 4.5 million rentable square feet of office space occupied by non-higher-education state agencies. That translates to 187 square feet per FTE. For analysis purposes the low number of rentable square feet per FTE will be 187, the medium will be 219, and the high will be 251.

The number of positions in Thurston County has been highly correlated (0.997) to the number of statewide positions. The mean of Thurston County positions in relationship to Statewide positions is 33.764% with a standard deviation of 1.31%. For the high, medium, and low forecasts we will use the mean value and one standard deviation on either side of the mean for the percentage of statewide positions that are within Thurston County. Thus, for forecasting purposes we will use 35.074% of the Statewide forecast for the high, 33.764% for the medium, and 32.454% for the low. For the most recent five-year period the percentage has been 34.9%.

Historically, the number of non-higher education positions statewide has been highly correlated (0.980) to the number of people in the state. The historical average has been 11.62 non-higher education workers per thousand of state population with a standard deviation of 0.7 positions per thousand. Thus, following the same method, for a high, medium and low forecast, we will use 10.92 positions, 11.62 and 12.32 positions per thousand for the number of statewide positions for the forecast. For the most recent five-year period the percentage has been 12.05 positions.

There are two outside forecasts of statewide population available. The Office of Financial Management has forecast population out to 2020. The federal census bureau has forecast Washington State population to the year 2025. Both forecasts will be used. In addition, General Administration staff has forecast statewide population to the year 2020 based on the cohort survival method recognizing density ceilings on population in Western Washington (especially in light of the I-695 impacts on ferry and transit services). The following chart displays the forecasts of statewide population.

Year	OFM History and Forecast	Federal Population Forecast	General Administration Forecast
1999	5,759,756	5,759,756	5,759,756
2000	5,827,014	5,858,000	5,845,729
2001	5,892,813	5,935,911	5,930,056
2002	5,962,116	6,014,859	6,013,685
2003	6,038,472	6,094,857	6,095,703
2004	6,119,206	6,175,918	6,178,193
2005	6,200,375	6,258,000	6,261,425
2006	6,282,211	6,333,772	6,344,171
2007	6,364,838	6,410,461	6,426,642
2008	6,448,383	6,488,079	6,508,919
2009	6,532,928	6,566,637	6,591,271
2010	6,618,463	6,646,146	6,673,623
2011	6,704,783	6,726,617	6,755,835
2012	6,791,885	6,808,063	6,837,971
2013	6,879,761	6,890,495	6,920,072
2014	6,968,193	6,973,925	7,002,165
2015	7,056,933	7,058,000	7,084,237
2016	7,145,636	7,129,639	7,166,283
2017	7,234,254	7,202,005	7,248,324
2018	7,322,743	7,275,105	7,330,376
2019	7,410,871	7,348,947	7,412,446
2020	7,498,446	7,423,539	7,494,541
2021		7,498,888	7,576,667
2022		7,575,002	7,658,838
2023		7,651,888	7,741,062
2024		7,729,555	7,823,348
2025		7,808,000	7,905,704

Applying the high, medium and low statewide staffing ratios to the statewide forecasts the following is the high, medium and low forecast of statewide staffing:

Year	Low	Medium	High
1999	71,100	71,100	71,100
2000	71,599	71,770	71,966
2001	72,101	72,446	72,842
2002	72,606	73,128	73,729
2003	73,115	73,817	74,627
2004	73,628	74,512	75,536
2005	74,144	75,214	76,456
2006	74,664	75,923	77,387
2007	75,187	76,638	78,329
2008	75,715	77,360	79,283
2009	76,245	78,089	80,249
2010	76,780	78,824	81,226
2011	77,318	79,567	82,215
2012	77,861	80,316	83,216
2013	78,406	81,073	84,230
2014	78,956	81,837	85,256
2015	79,510	82,608	86,294
2016	80,067	83,386	87,345
2017	80,629	84,171	88,408
2018	81,194	84,964	89,485
2019	81,763	85,765	90,575
2020	82,337	86,572	91,678
2021	82,914	87,388	92,794
2022	83,495	88,211	93,924
2023	84,081	89,042	95,068
2024	84,670	89,881	96,226
2025	85,264	90,728	97,398

Based on that forecast and applying the high, medium and low forecasts of the percentage of statewide staffing that is housed in Thurston County the following array is found:

Trended Thurston County

Year	Low	% Change	Medium	% Change	High	% Change
1999	24,229		24,229		24,229	
2000	24,353	0.5%	24,374	0.6%	24,738	2.1%
2001	24,478	0.5%	24,520	0.6%	25,059	1.3%
2002	24,603	0.5%	24,691	0.7%	25,385	1.3%
2003	24,729	0.5%	24,924	0.9%	25,715	1.3%
2004	24,856	0.5%	25,158	0.9%	26,049	1.3%
2005	24,983	0.5%	25,395	0.9%	26,388	1.3%
2006	25,111	0.5%	25,635	0.9%	26,731	1.3%
2007	25,240	0.5%	25,876	0.9%	27,079	1.3%
2008	25,369	0.5%	26,120	0.9%	27,431	1.3%
2009	25,499	0.5%	26,366	0.9%	27,787	1.3%
2010	25,630	0.5%	26,614	0.9%	28,149	1.3%
2011	25,761	0.5%	26,865	0.9%	28,514	1.3%
2012	25,893	0.5%	27,118	0.9%	28,885	1.3%
2013	26,025	0.5%	27,373	0.9%	29,261	1.3%
2014	26,159	0.5%	27,631	0.9%	29,641	1.3%
2015	26,293	0.5%	27,892	0.9%	30,026	1.3%
2016	26,427	0.5%	28,154	0.9%	30,417	1.3%
2017	26,563	0.5%	28,420	0.9%	30,812	1.3%
2018	26,699	0.5%	28,687	0.9%	31,213	1.3%
2019	26,836	0.5%	28,958	0.9%	31,618	1.3%
2020	26,973	0.5%	29,230	0.9%	32,029	1.3%
2021	27,111	0.5%	29,506	0.9%	32,446	1.3%
2022	27,250	0.5%	29,784	0.9%	32,868	1.3%
2023	27,390	0.5%	30,064	0.9%	33,295	1.3%
2024	27,530	0.5%	30,347	0.9%	33,728	1.3%
2025	27,671	0.5%	30,633	0.9%	34,166	1.3%

Two additional independent forecasts by the Employment Security Department and the Thurston Regional Planning Council show similar growth patterns although on different bases. Thurston County's base is employment not FTE positions. The Employment Security Department's forecast is for all government in Thurston County, not just state government. Their forecasts are as follows:

Independent Forecasts

Thurston Regional Planning Council (TRPC)

<u>Year</u>	<u>TRPC Employed</u>	<u>Annual Percent Change</u>
1995	19,854	
2000	21,050	1.2%
2005	22,100	1.0%
2010	22,800	0.6%
2015	23,200	0.3%
2020	23,600	0.3%
2025	23,950	0.3%

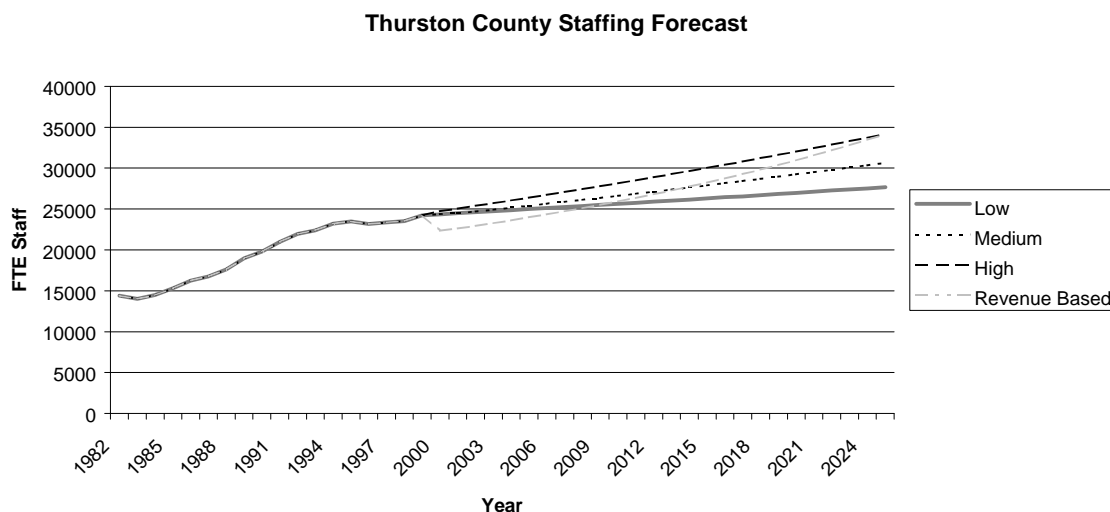
Employment Security Department (ESD)

<u>Year</u>	<u>ESD All Gov'n't Employment</u>	<u>Annual Percent Change</u>
1998	33,000	
2003	36,400	2.0%
2008	39,400	1.6%

In 1999 the voters passed Initiative 695 that reduced the Motor Vehicle Excise Tax. That will reduce state revenues. Until the Legislature acts there is no way of knowing the exact impact the loss of this revenue will have on Thurston County employment. But, using the historical relationship of revenue to Thurston County positions the following is a “revenue based” forecast.

Year	Revenue Based	% Change
1999	24,229	
2000	22,359	-7.7%
2001	22,618	1.2%
2002	22,940	1.4%
2003	23,271	1.4%
2004	23,614	1.5%
2005	23,969	1.5%
2006	24,336	1.5%
2007	24,715	1.6%
2008	25,107	1.6%
2009	25,511	1.6%
2010	25,929	1.6%
2011	26,361	1.7%
2012	26,808	1.7%
2013	27,269	1.7%
2014	27,745	1.7%
2015	28,237	1.8%
2016	28,745	1.8%
2017	29,271	1.8%
2018	29,813	1.9%
2019	30,374	1.9%
2020	30,952	1.9%
2021	31,550	1.9%
2022	32,168	2.0%
2023	32,806	2.0%
2024	33,465	2.0%
2025	34,145	2.0%

The following chart summarizes these results:



The following chart summarizes the space that will be needed in Thurston County to meet these FTE needs:

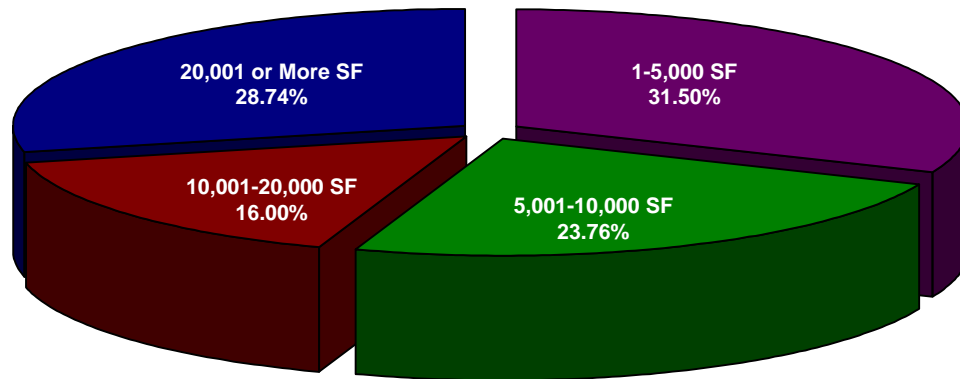
Additional Rentable Square Feet Needed In Thurston County

Year	Low	Medium	High	Revenue Based
2000	23,207	31,755	127,711	0
2001	46,533	63,729	208,431	0
2002	69,978	101,185	290,199	0
2003	93,543	152,122	373,031	0
2004	117,229	203,539	456,940	0
2005	141,036	255,440	541,939	0
2006	164,966	307,830	628,044	23,519
2007	189,018	360,714	715,267	106,498
2008	213,193	414,096	803,625	192,203
2009	237,491	467,980	893,132	280,817
2010	261,915	522,373	983,801	372,402
2011	286,463	577,277	1,075,650	466,998
2012	311,137	632,699	1,168,693	564,723
2013	335,938	688,643	1,262,945	665,689
2014	360,865	745,114	1,358,423	770,010
2015	385,921	802,117	1,455,141	877,782
2016	411,104	859,657	1,553,117	989,112
2017	436,417	917,739	1,652,367	1,104,119
2018	461,859	976,368	1,752,907	1,222,925
2019	487,431	1,035,549	1,854,754	1,345,650
2020	513,135	1,095,288	1,957,925	1,472,421
2021	538,970	1,155,590	2,062,437	1,603,367
2022	564,938	1,216,459	2,168,308	1,738,624
2023	591,038	1,277,902	2,275,556	1,878,331
2024	617,272	1,339,924	2,384,197	2,022,630
2025	643,641	1,402,530	2,494,251	2,171,671

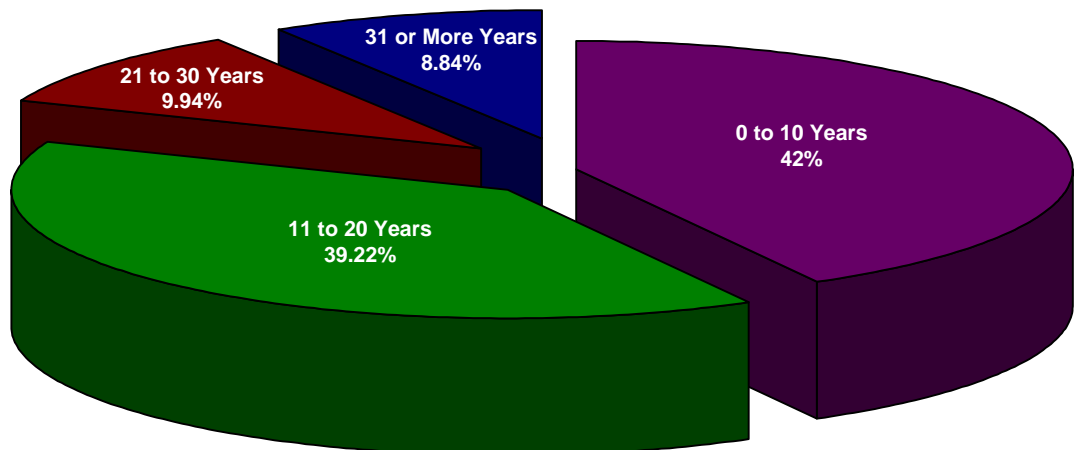
Assuming the medium construction program by 2005 the state will require an additional 255,440 rentable square feet of office space to meet its needs in Thurston County.

DEMOGRAPHIC PROFILE OF THURSTON COUNTY LEASED SPACE

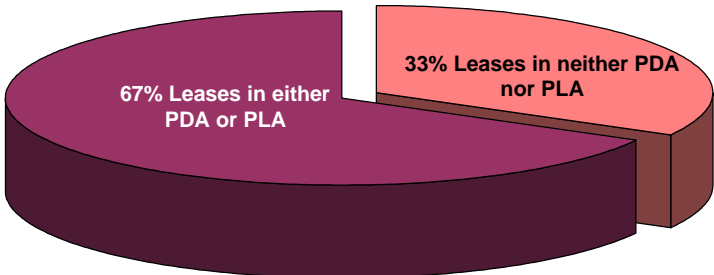
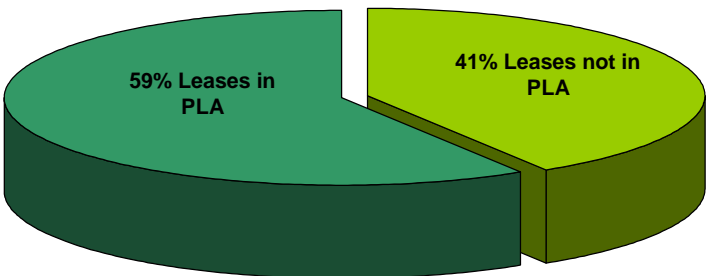
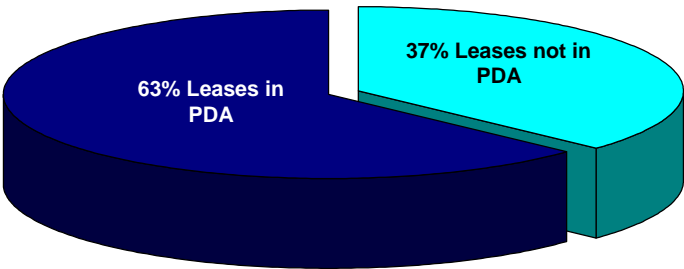
Office Building Leases by Square Feet (Thurston County)			
1 to 5,000 Square Feet	5,001 to 10,000 Square Feet	10,001 to 20,000 Square Feet	20,001 or More Square Feet
57 (31.50%)	43 (23.76%)	29 (16.00%)	52 (28.74%)



Office Building Leases by Building Age (Thurston County)			
0 to 10 Years	11 to 20 Years	21 to 30 Years	31 or More Years
76 (42.00%)	71 (39.22%)	18 (9.94%)	16 (8.84%)



THURSTON COUNTY OFFICE LEASE LOCATION ANALYSIS



PDA: 1991 Master Plan Preferred Development Area
PLA: 1999 Proposed Preferred Leasing Area

THURSTON COUNTY LEASE DEVELOPMENT PROJECTS UNDER CONSTRUCTION

December 1999

Project No.	City	Status	Sq. Feet	Vacating	Reason for Vacating	Vacated Sq. Feet	Sq. Feet (Increase/decrease)
228-06-98/ 286-09-97	Olympia	Two Attorney Generals Offices are relocating into a new Westside Office Building. A letter of interest has been issued.	38,361	Chandler Court (Olympia) Woodland Square (Lacey)	Current space inadequate – crowded. Consolidation	26,000	+12,361
138-04-98	Olympia	CTED and Workforce Training Board will relocate in year 2000 into new construction at 124 SW 10 th , Olympia. Negotiations almost complete. Letter of intent will soon be issued.	40,500	CTED leaving smaller office spaces in Olympia WTB is vacating office space on Airdustrial, Tumwater.	Consolidation, expansion, leaving substandard office space.	18,602	+21,898
263-09-97	Lacey	DSHS relocating from Woodland Square Bldg A into new construction at 640 Woodland Square. A Lease has been issued.	52,665	Woodland Square Bldg A	Program growth requires additional square feet.	33,184	+19,481

NEXT THURSTON COUNTY LEASE AND SPACE PLANNING ACTIVITIES

GA's next report on Lease and Space Planning, Report #4, will be issued in April 2000. It will concentrate on the following four areas: Master Plan leasing policy, agency-level space and lease planning, siting new state owned and leased offices, and further analysis of state facility spending and costs.

Master Plan Leasing Policy

The organizing principles of the 1991 Master Plan have been re-affirmed over the past seven months of lease and space planning by GA, other state agencies and the legislative fiscal committees.

- Cooperation and partnerships between the state and its host communities.
- Development according to sound growth management principles, including mixed uses and urban densities.
- Linking land uses to regional transportation systems.
- Reducing transportation impacts of growth through careful siting.
- Need for comprehensive planning and clear standards.

A leasing policy framework for the Leasing Policy envisioned in the 1991 Master Plan has begun to emerge:

- Coordinating future space needs to better co-locate and consolidate state facilities.
- Identification of *preferred development* (oriented toward but not necessarily limited to state ownership) and *preferred leasing areas* (oriented on private development and ownership).
- Agreement on performance, space and cost standards for both state owned and state leased offices.
- Development of transportation demand management strategies and consistent parking management practices.
- Executive and legislative coordination of state leasing decisions with special emphasis on better managing budget impacts.

GA will present a proposed Lease Policy amendment to the *Master Plan* at the State Capitol Committee meeting scheduled in either March or April 2000. It will include an updated *Preferred Leasing Area* policy initially proposed on June 3, 1999.

Agency Space Planning

Two types of agency-level space and lease planning will occur over the next three months. Some planning will continue for those agencies affected by the Department of Health, Co-Located Transportation Agencies, or Legislative Building project reports. New GA-coordinated planning will start on other agencies.

Continued Planning. The following agencies may continue space and lease planning depending on action by the 2000 Legislature: departments of Health, Transportation, Licensing, Washington State Patrol, Transportation Improvement Board, Washington Traffic Safety Commission, County Road Administration Board, House of Representatives, State Senate, Code Reviser, Legislative Service Center, and other legislative and executive branch agencies and legislative committees potentially affected by the rehabilitation of the Legislative Building or construction of a Capitol Addition.

New Planning. GA will begin to work more closely with the following agencies in space and lease planning: Department of Revenue, Office of the Attorney General, and Office of the Administrator of the Courts. GA will also begin to inventory co-location opportunities for other agencies, and identify the most serious leasing situations that require correction.

Siting New State Offices

GA will complete work on Master Plan changes to both *Preferred Development Areas* and the proposed *Preferred Leasing Areas*. This will include developing site selection criteria building on planning work of NBBJ, the planning consultant for the Transportation Agencies study, and the East Campus Plus site selections for the Ecology and Labor and Industries building projects. It will also include work with the cities of Olympia and Tumwater, and the Port of Olympia.

Facility Cost and Spending Analysis

The study team will continue work on developing a complete budget and spending view of both state leasing and state ownership for both JLARC model analysis and budget development. This will involve work with OFM, other state agencies, the legislative fiscal committees, and their staffs.

POSSIBLE CHANGES TO THE 1991 STATE CAPITOL MASTER PLAN

The need for three changes to the 1991 *State Capitol Master Plan* has been identified to date. Each of these changes is subject to the approval of the State Capitol Committee that is comprised of the Governor (or his designee), the Lieutenant Governor, the Secretary of State, and the Commissioner of Public Lands.

First, the local government-designated *Preferred Development Areas (PDA's)* have changed in Lacey and Tumwater. The new PDA's are shown on Map 1.

Specific development sites within those areas have been further identified as shown. Some of these sites are in private ownership and designating them here does not necessarily indicate that the property owners have interest in developing offices for the state to lease or own.

Second, the three cities have identified areas within their jurisdictions that they prefer that state office leasing occur. Those *Preferred Leasing Areas (PLA's)* are shown on Map 4.

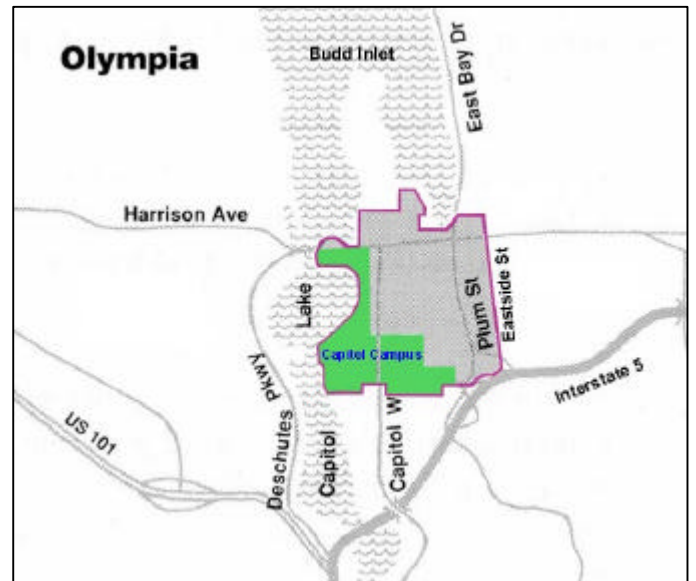
Third, the Leasing Policy envisioned in the 1991 Master Plan was never developed. As explained under "Next Thurston County Lease and Space Planning Activities," a leasing policy is needed to:

- Ensure that future leasing will better co-locate and consolidate state facilities.
- Clarify where state ownership and leasing is preferred.
- Define performance, space and cost standards for both state-owned and state-leased offices.
- Require transportation demand management strategies and consistent parking management practices.
- Provide for better executive and legislative coordination of state leasing decisions and budget impacts.

The need for additional Master Plan changes may be identified throughout 2000 as the Study continues.

**Map 1. Thurston County
Preferred Development Areas (PDAs)**

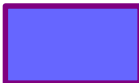
Revision from the 1991 Capitol Master Plan
December 14, 1999



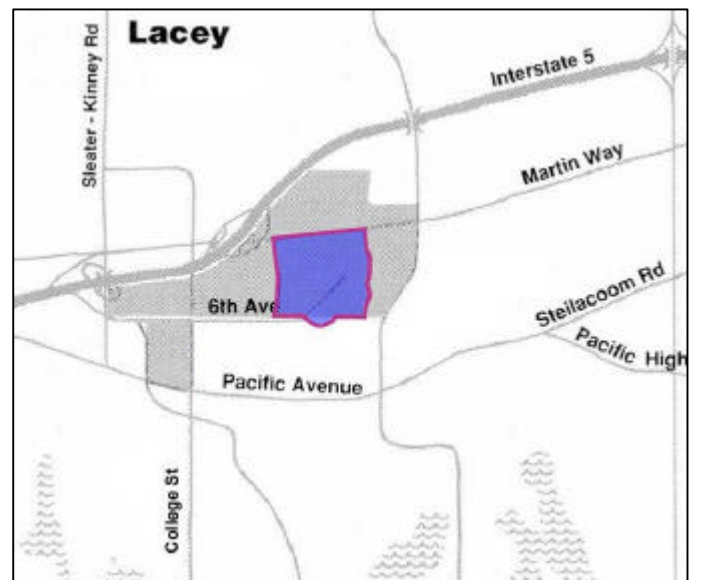
State Capitol Campus



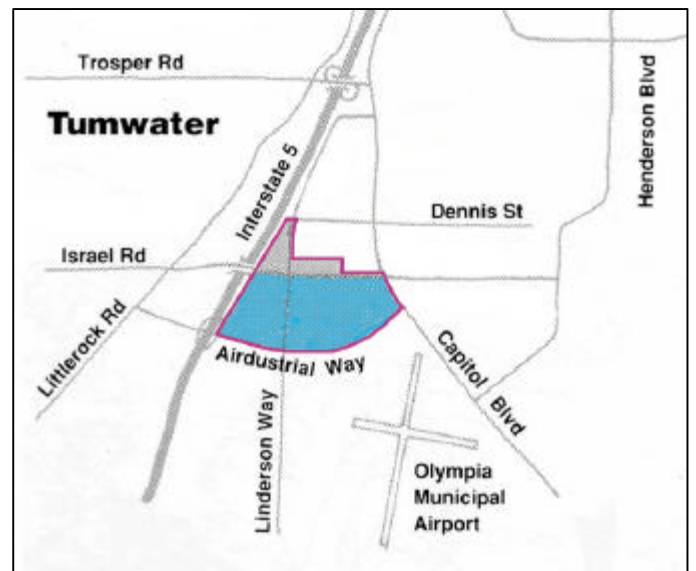
1992 Preferred Development
Areas



1998 City of Lacey Revised
Preferred Development Area



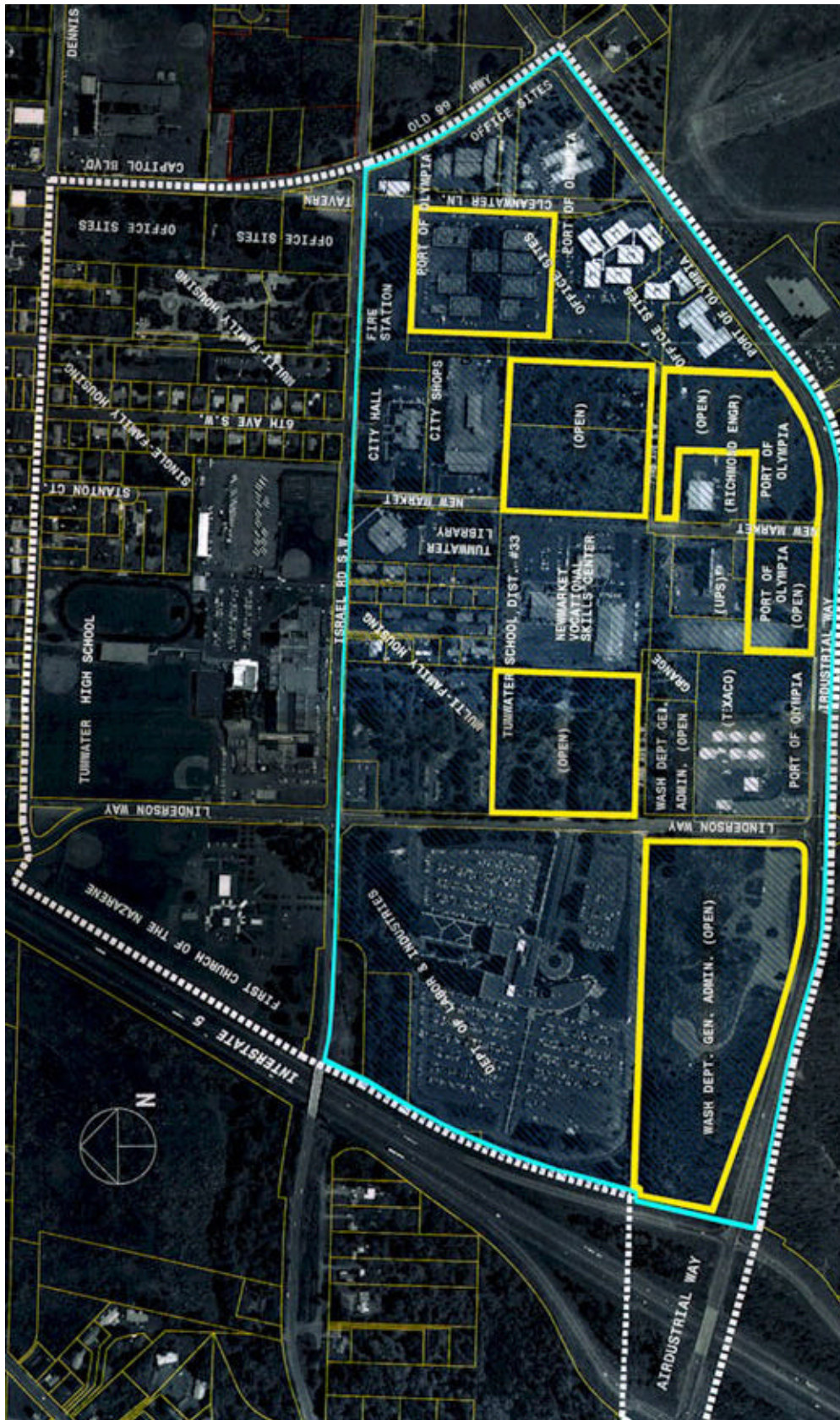
1999 City of Tumwater Revised
Preferred Development Area
(Tumwater Town Center)



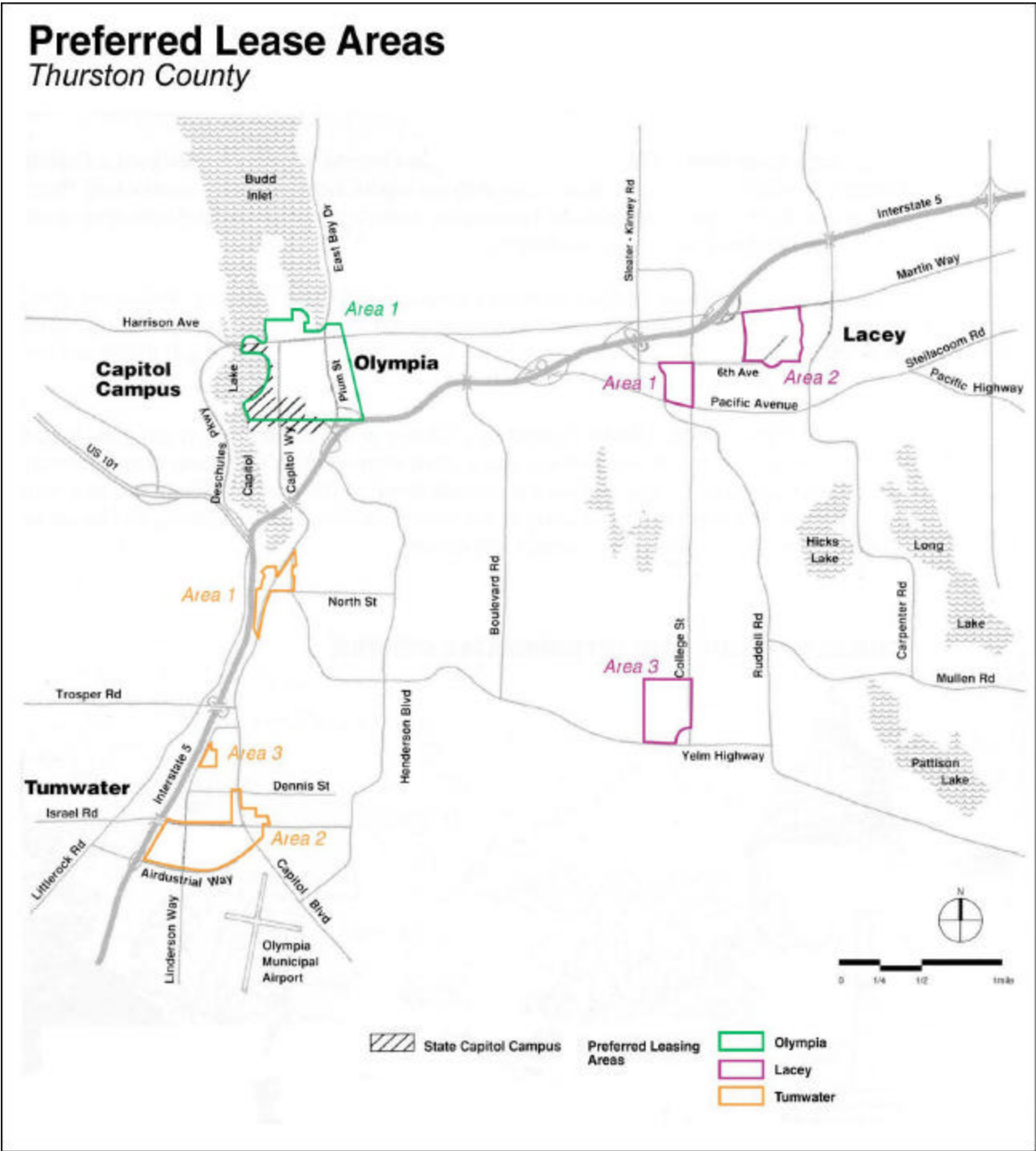
Map 2. Olympia Preferred Development



Map 3. Tumwater Preferred Development



Map 4. Proposed Preferred Lease Areas



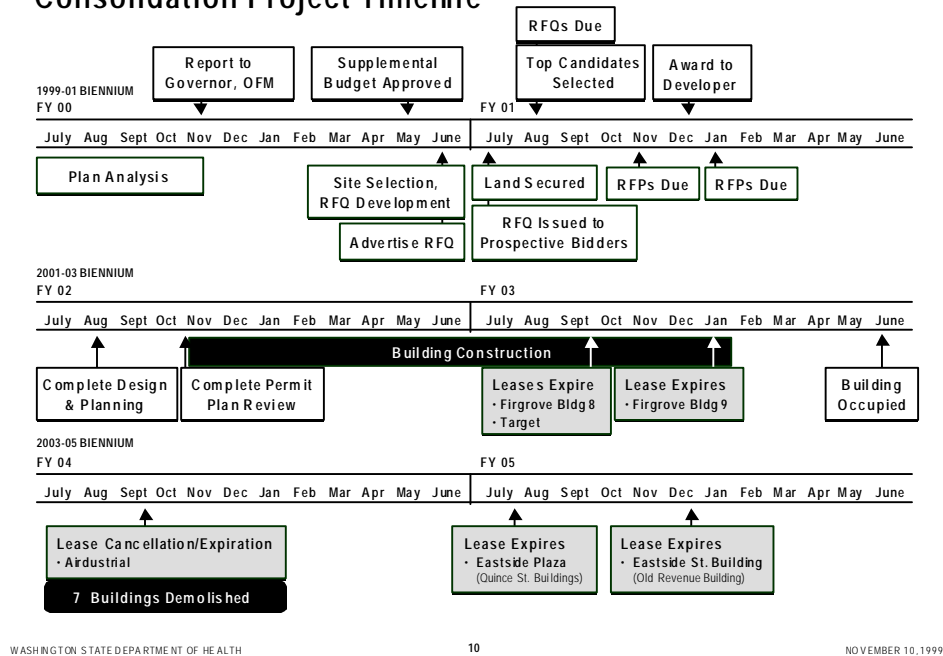
Section III. Agency-level Planning Update

GOVERNOR'S SUPPLEMENTAL BUDGET REQUEST FOR DEPARTMENT OF HEALTH

The Governor's December 16, 1999 Supplemental Budget requests authority for GA to procure a replacement leased facility for the Department of Health (DOH) by 2003 with an option to later purchase that office building. DOH estimates that the most cost effective consolidation approach for them is to lease develop a 261,500 square foot facility in one phase.

The Governor has requested a \$400,000 appropriation for capital office building planning to complete preparatory work leading to contract award during the winter of 2001.

Consolidation Project Timeline



Building Consolidation Study – Questions and Answers

Why does the Department of Health need a new building?

In three and a half years we will be required to vacate seven buildings that no longer meet state leasing standards. That represents 30 percent of our Thurston County office space. Programmatic relationships to other buildings will require that additional staff be moved, resulting in a need to relocate half of our agency by 2003.

It's difficult to coordinate statewide activities from a headquarters that is spread out over 21 different office buildings in Thurston County. This fragmentation makes communication between programs difficult, wastes valuable staff time in traveling between locations, adds significantly to the agency's administrative costs, and frustrates our stakeholders and customers. For example, a home health provider must visit our Eastside Plaza office for a professional license and Target Center for their facility license.

Because our offices are in so many different locations, we must maintain several duplicate operating systems. For example, the department operates 28 computer networks statewide – 22 in Thurston County alone. Each building also requires receptionists, building managers, lunchrooms, and mailrooms. Consolidation would centralize these services and make Department of Health more efficient.

What did your report to the Governor's office include?

Our report included a feasibility study done by a private consultant and conceptual cost analyses done by our agency and the Department of General Administration. We sent the findings to the Governor's Office as a formal request to consolidate our 21 Thurston County offices.

What did the study find?

Our findings indicate that a state-developed, single-phase building would be the most cost-effective model for the state for the first five years. Total cost for this option would be about \$49,980,000. A developer-built, single-phase building is very comparable in price at a total cost of \$46,168,000.

We are also sensitive to budget constraints that may preclude purchase of a state building by 2003. Recognizing this, we are requesting the option that allows the state to work with a developer. We'd lease the building with an option to buy in five years. This would allow us to build the new facility under state specifications and would result in operational cost savings to the state beginning at the time of purchase, in 2008.

How will you pay for the new building?

One time moving expenses will come in the form of a capital request in the 2001-03 Biennium. Lease costs will be higher for the first five years until the building is purchased. For these five years, the department will need to request additional funding. The agency will offset some of these costs through building-related efficiencies, such as lower utility costs, the need for fewer computer networks, reduced furniture needs, less use of specialized contractors such as electricians and phone installation persons, and off-site conference room rentals. After the building is purchased, we estimate that savings will offset any additional costs associated with the new building, which means we will be spending less than if we were in multiple locations.

Does the passage of I-695 affect your proposal for a new building?

With or without I-695, half of our current employees will be displaced from their current offices by 2003 because buildings are being demolished. Rather than make a quick decision in 2003, we have taken the time to do a comprehensive study so we can make a good business decision, do what is best for our customers, and save taxpayers' money over the long term. Right now the most cost-effective option is a single building.

When choosing a site, will you look at potential impacts to traffic and surrounding businesses?

Regardless of which location is chosen, local building ordinances and zoning restrictions will be followed. In addition to saving money and improving customer service, local traffic concerns, availability of mass transit, and proximity to I-5 are primary concerns.

Our research looked at available locations in the preferred development areas of Olympia, Lacey and Tumwater. Initial information suggests that Tumwater has the flexibility, as well as land parcels large enough to accommodate this project. The department will continue to work with Thurston County developers and the Department of General Administration, however, to see if other locations are viable.

What process will you use to choose a contractor?

If our proposal is approved, we will use a two-step process. First we will issue a Request for Qualifications to the public. From the pool of candidates who respond, the top two will be asked to proceed with a formal proposal.

If your request is approved, when will the new building be done?

The current plan anticipates building construction can begin as soon as September 2001 – the date by which permitting and site planning are estimated to be completed. Our goal is to occupy the building before September 2003.

What other assumptions are being made for the new building?

We would build the facility to meet our projected needs through 2010. Our intent is to lease the extra space and allow room for modest growth.

We will use new space standards currently being developed by the Department of General Administration. The standards include specifications of cubicle size, types of furniture, and other building specifications.

The building will be efficient, flexible and not monumental in character. We will use modular furniture that can be arranged in a variety of ways and make sure we're able to adapt to changing technology.

What will Department of Health do if the consolidation proposal is denied?

We will work with General Administration to find other accommodations for the 571 employees that will be dislocated when existing buildings are demolished in 2003. Currently, there is no existing building in the Tumwater, Olympia or Lacey area that could house all of these employees. Projections show this would cost the state more in the long term than moving Department of Health into a single building.

What is the next step?

The request needs to be approved by the Legislature before we can proceed.

Who can I contact for more information?

For more information on the Department of Health's building consolidation project, contact Eric Slagle at (360) 236-3003, or Suzette Frederick at (360) 236-3901.

Summary of Department of Health Financial Analysis

General Administration (GA) conducted a multiple phase financial analysis of proposals to meet the future space needs of the Department of Health (DOH). A major lessor has informed the Department that in September 2003 he will be demolishing presently occupied space. DOH will be vacating approximately 114,320 square feet at that time. It is estimated that replacement of that 114,320 square feet, with an estimated 2003 cost of \$14.79 per rentable square foot (rsf) will cost approximately \$19.25 per rsf to replace on the lease market. DOH perceived this forced vacation as an opportunity to review its 2010 space needs and methods to meet them. They reviewed the concepts of lease development and state development of: 1) a 243,190 rsf building; 2) multiple buildings; and 3) a single building developed in phases. The initial cost **and** the life-cycle costs of multiple buildings was higher than either the single building in one phase or the single building in two phases. Thus, the single building-single phase and single building-two phases are the only options presented for further review. Both these options are analyzed assuming state development and lease (developer) development. In addition, a lease development that is acquired after five years is presented. These five options are then compared with the "status quo" option that assumes DOH will replace 114,320 square feet of space with \$19.25 per rsf space.

The following table summarizes the information detailed on the C-100's and the life cycle cost analysis sheets for the status quo and the five acquisition options. (Note: For comparison purposes, the lease development with the acquisition after five years the life cycle costs are adjusted for the 25-year planning horizon even though the entire acquisition will take 30 years.):

Life Cycle Cost Summary

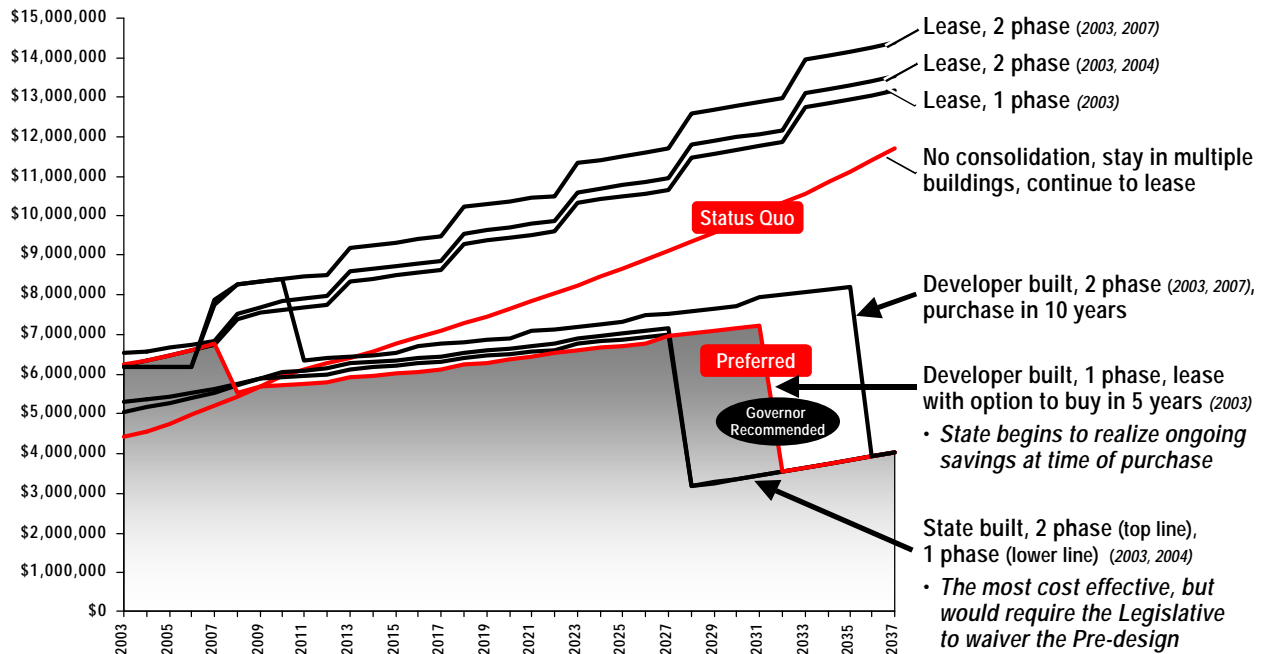
Summary of C-100's and Life Cycle Cost Analysis

	Single Phase <u>Status Quo</u>	State Devel. <u>Single Phase</u>	Developer Devel. <u>Single Phase</u>	Two Phases <u>Status Quo</u>	State Devel. <u>Two Phases</u>	Developer Devel. <u>Two Phases</u>	Combined <u>Acquisiton Year 5</u>	Two Phases <u>2003 & 2007</u>
C-100								
Acquistion Cost		\$4,626,000	\$4,626,000		\$4,626,000	\$4,626,000	\$45,325,000	\$4,626,000
Consultant Services		\$4,615,000	\$2,098,000		\$4,672,000	\$2,140,000	\$129,000	\$2,355,000
Construction Cost		\$34,941,000	\$34,941,000		\$36,249,000	\$36,249,000	\$1,581,000	\$38,030,000
Other Costs		\$5,798,000	\$4,503,000		\$6,108,000	\$5,078,000	\$929,000	\$5,678,000
Total Project Cost (excluding furniture and IS equipment)		\$49,980,000	\$46,168,000		\$51,655,000	\$48,093,000	\$47,964,000	\$50,678,000
Life Cycle Cash Cost	\$149,574,673	\$108,335,487	\$129,345,332	\$137,348,841	\$97,472,403	\$119,974,005	\$114,894,279	\$138,486,839
Life Cycle Net Present Value Cost	\$63,430,356	\$65,524,773	\$80,658,119	\$53,463,400	\$55,918,065	\$71,976,859	\$75,214,768	\$85,029,261
Estimated Starting Rental Rate + Other Cost of Lease (per rsf per year)	\$19.05	\$23.02	\$27.76		\$23.55	\$28.58	\$25.63	\$31.68

This indicates that the best-cost alternative to the status quo is a state developed single-phase building. That option will save \$41,239,186 over the 25 year planning horizon (recognizing the residual value of the building and land). However, the net present value of that option indicates that it is \$2,094,417 more expensive than the status quo. The "comparable rates" indicate that the state developed single-phase building will have a starting rate of about \$4 per rsf more than the status quo option.

Annual Building-Related Cost Comparisons*

State Built Vs Developer Built (Single Phase, Two Phase)



SOURCE: Department of General Administration. Status quo assumes typical government lease rates for Thurston County.

* Costs reflect operating expenses for lease, custodial, utilities, management fees and interest payments. Does not include one-time moving costs or furnishings.

Most Favorable Approach

25 Year Planning Horizon

Category	Preferred Option	Cost Advantage
State v. Private Development		
<i>Single Phase Project</i>		
Total Project Cost	Private Development	\$3.8 million
Life Cycle Cash	State Development	\$21.0 million
Discounted (NPV) Life Cycle Cost	State Development	\$15.1 million
<i>Two Phase Project</i>		
Total Project Cost	Private Development	\$3.6 million
Life Cycle Cash	State Development	\$22.5 million
Discounted (NPV) Life Cycle Cost	State Development	\$16.1 million
Development v. Continued Leasing		
<i>Single Phase Project</i>		
Cash Basis	State Development	\$41.2 million
Discounted (NPV) Life Cycle Cost	Continued Lease	\$2.1 million
<i>Two Phase Project</i>		
Cash Basis	State Development	\$39.9 million
Discounted (NPV) Life Cycle Cost	Continued Lease	\$2.5 million

DOH Building Consolidation Project Lease and Cost Comparison

November 10, 1999

1. Funding Sources

General Fund-State – Currently supports **36.5%** of lease costs.

The department received lease increases of \$217,809 for the 1999-01 Biennium.

Federal – Currently supports **27.6%** of lease costs.

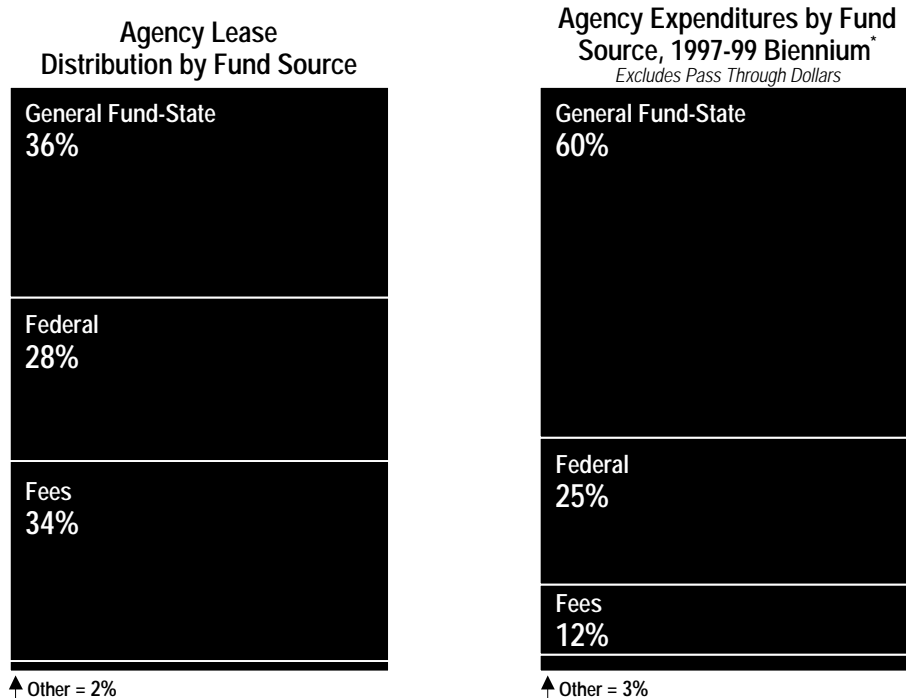
Many of the grants are lidded – these increases would have to be borne by the federal program with existing federal funding. Some federal agencies are receptive to covering administrative costs like rent increases which the department would request in future grant applications. The department received federal appropriation authority of \$219,000 to cover lease increases.

Fees – Currently supports **33.8%** of lease costs.

Other – Currently supports **2.3%** of lease costs.

These funds are either interagency agreements or dedicated funds administered by another agency. It is assumed that allowed costs would be covered by these sources.

Sources of Agency Lease Dollars Compared to Agency Expenditures*



* Excludes federal and state general fund "pass-through" dollars to local governmental entities and grant recipients. Pass-through dollars in 1997-99 were over \$300 million out of \$480 million in total expenditures.

2. Year One Option Summary and Six-Year Cost (Annual amounts)

	Total Square Feet	Total Cost Year 1	Total Cost Year 6
Current lease	253,695	\$3,447,715 ¹	—
Lease in 2003	263,743	\$4,426,082	\$5,448,272
Proposed state building (single phase)	243,190	\$5,058,502	\$5,718,630
Proposed developer (single phase)	243,190	\$6,212,613	\$7,383,443
Combined acquisition	243,190	\$6,232,613	\$5,522,642 ²

SOURCE: DEPARTMENT OF GENERAL ADMINISTRATION, November 1999.

¹Current Tumwater leases are far below typical Thurston County government lease rates.

²Agency anticipates partially offsetting difference through operating efficiencies and inherent building savings in year one, and fully offsetting difference once building is purchased.

3. Preliminary Savings and Cost Avoidance Estimates¹ (Annual amounts)

	Current (1999)	If Non-consolidated in 2003	If Consolidated in 2003
Square footage	253,695	263,745	243,190
Utilities ²	\$402,000	\$367,000	\$301,000
Network lines ³	\$320,000	\$491,000	\$207,000
Furniture ⁴	\$351,000	\$351,000	\$100,000
Internal staff moves ⁴	\$527,000	\$527,000	\$125,000
Travel for meetings, work activities ⁴	\$21,000	\$21,000	—

¹Estimates are preliminary based on conceptual models. Full estimates will be identified in the next stage of planning.

²Current number reflects actuals for FY 1999. The 2003 scenario makes an assumption that the new buildings into which staff are relocated would be more efficient than current buildings. The consolidated model is based on the BCRA report, "Facility Consolidation Study for the Washington State Department of Health," November 5, 1999.

³The Department of Health would need to add another geographic site at an approximate ongoing cost of \$171,000 per year. This does not include one-time costs.

⁴Assumes that costs remain approximately the same since the Department of Health will still be fractured. Retrofit challenges and program changes across multiple systems and space would still occur.

NEXT STEPS – DEPARTMENT OF HEALTH PROJECT

The Governor's December 16, 1999 Supplemental Budget requests authority for GA to procure a replacement leased facility for the Department of Health (DOH) by 2003 with an option to later purchase that office building. DOH estimates that the most cost effective consolidation approach for them is to lease develop a 261,500 square foot facility in one phase.

The Governor has requested a \$400,000 capital office building planning appropriation to complete preparatory work leading to contract award during the winter of 2001. That appropriation would support the following activities:

- Functional and space programming.
- Site selection.
- Development of the procurement requests. That might be a Request for Qualifications (RFQ), a Request of Qualifications and Quotations (RFQQ) and/or a Request for Proposals (RFP).
- Evaluation of lease development proposals and award.
- DOH and GA project management for current biennium.

SUMMARY OF TRANSPORTATION AGENCIES CO-LOCATION REPORT

Section 303 of the 1999-01 Transportation Budget provided \$100,000 to the Department of General Administration to perform an evaluation of the cost-effectiveness of a proposed co-located Transportation Agencies facility. The study involves the needs represented by mostly leased office space currently held by the following agencies in Thurston County:

- Department of Transportation.
- Washington State Patrol.
- Department of Licensing.
- County Road Administration Board.
- Transportation Improvement Board.
- Washington Traffic Safety Commission.

The purpose of the study is to estimate the costs and benefits of building a co-located office facility at one of three potential locations together with a comparison of alternative procurement methods for the needed new facility:

- Tumwater Satellite Campus – Adjacent to Labor & Industries.
- Capitol Campus – East of existing Transportation Building.
- Lacey Satellite Campus – Adjacent to Ecology.

The six agencies are in 22 leased office buildings (in addition to state owned facilities) scattered throughout Lacey, Olympia and Tumwater.

The following is a summary of the amount of the space and staff (as of 7/1/99) for each of the departments/agencies that would be co-located in the new facility and the projected headcounts of each agency at 2010.

Existing Space and Current/Projected Headcount

Agency/Commission	1999	1999	2010
	<u>Square Feet</u>	<u>Employee Headcount</u>	<u>Headcount Agency Projection</u>
Department of Transportation	79,375	367	415
Department of Licensing	90,962	420	470
Washington State Patrol	93,700	475	525
County Road Admin Board	4,963	17	17
Transportation Improvement Board	2,850	18	20
Traffic Safety Commission	<u>6,400</u>	<u>23</u>	<u>28</u>
	278,250	1,320	1,475

The projected 2010 space needs of the candidate agencies are as follows.

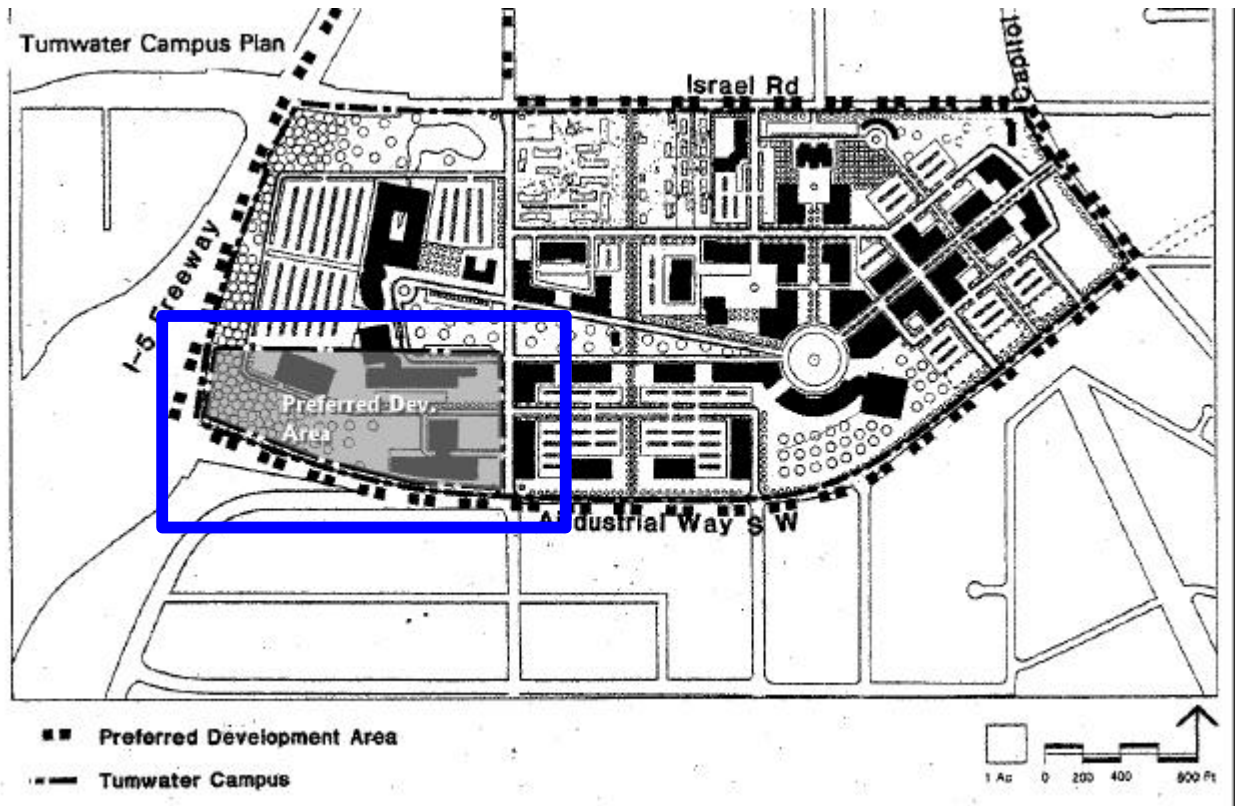
Co-located Transportation Agencies Estimated Space and Facility Needs

	2010 Headcount				
	Agency				
	Projection				
Department of Transportation	415				
Department of Licensing	470				
Washington State Patrol	525				
County Road Admin Board	17				
Transportation Improvement Board	20				
Traffic Safety Commission	28				
	<u>1,475</u>	x	215 ASF	=	317,125 Rentable SF
					20,242 Rentable to Gross
					(6% of rentable)
	Special				
	Joint/State/Public				
	<u>Spaces</u>				
Training Room – 30 seat	1,200				
Teleconferencing Room 20 seat	750				
Auditorium – 200 seat	3,600				
Assembly Space – 60 seat	1,200				
	<u>6,750</u>	ASF +	20% =	<u>8,100</u>	GSF
				345,467	Total Estimated GSF

Candidate Sites

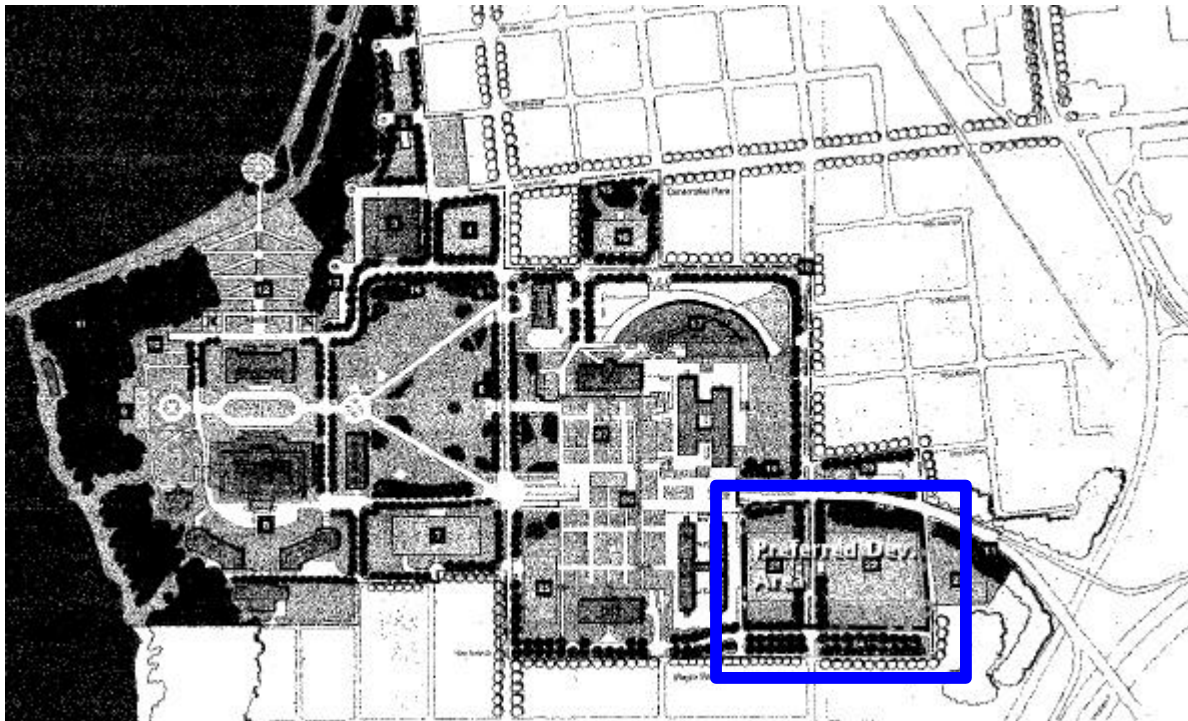
The sites on each campus are indicated below and the next page. Each of the sites will accommodate the co-located Transportation Agencies Facility as indicated in the following material.

Campuses with Sites Highlighted



Campuses with Sites Highlighted, continued

Capitol Campus Preferred Development Area



Lacey Campus Preferred Development Area



Development Concepts

The six physical concepts are as follows:

- Option 1 Tumwater (Surface Parking).
- Option 2 Tumwater (Blend of Surface and Structured Parking).
- Option 3 Tumwater (Structured Parking).
- Option 4 Olympia (Structured Parking Below Building).
- Option 5 Olympia (Structured Parking Adjacent Lot).
- Option 6 Lacey (Structured Parking).

Comparison of Development Concepts

In order to identify the most appropriate and cost-effective development concept (with the comparison of the procurement methods provided later in this document) the following non-cost evaluative criteria were compiled with the project's steering committee:

Site	(physical appropriateness and development hurdles)
Environmental	(sensitive areas and impacts)
Access	(convenience and support of public transportation)
Design Potential	(contextual fit and urban design contribution)

The planning team and the steering committee's application of the criteria to each of the options is summarized in the table Site and Urban Design Criteria on the following page.

As indicated, each option was scored for each criterion on a scale of 1 to 5, with 1 being most desirable and a score of 5 the least desirable. The criteria were weighted equally. In the aggregate, the Capitol Campus Option 4 (with parking under the building) and the Tumwater Option 3 with all of the parking in structures, were identified as the most appropriate sites and physical solutions. In general those two site-specific options were comparatively better than the other four alternatives because:

- The sites are physically more development-ready and compatible with the State's planning for its needs and therefore more readily acceptable to the surrounding neighbors.
- The potential environmental challenges are less formidable.
- The design potentials and the potential urban design contribution are either approximate or comparatively better than the other options.

The least desirable options, Tumwater Option 1 (with all surface parking) and the Capitol Campus Option 5 (with adjacent aboveground structured parking), were scored comparatively less desirable in nearly all of the criteria.

Site and Urban Design Criteria

Transportation Agencies Co-location Study Site and Urban Design Criteria Matrix

Classification Criteria	Option 1 Turnwater rating All surface parking		Option 2 Turnwater rating Surface & structured parking		Option 3 Turnwater rating All structured parking		Option 4 Capitol Campus rating Parking under building		Option 5 Capitol Campus rating Separate parking structure		Option 6 Lacey rating	
	rating	rating	rating	rating	rating	rating	rating	rating	rating	rating	rating	rating
Site												
Suitable geotech conditions *	2	2	2	2	2	2	1	1	1	1	1	1
Suitable area for development and future expansion	2	1	1	1	1	1	3	3	3	3	3	3
No Regulatory constraints	2	2	2	2	2	2	1	1	1	1	1	1
Development consistent with master plan	3	2	2	2	2	2	1	1	5	5	2	2
No Infrastructure problems *	2	2	2	2	2	2	1	1	1	1	1	1
Environmental												
Wetland mitigation required *	3	2	2	2	2	2	1	1	1	1	2	2
Displacement of community assets	5	4	4	4	4	4	3	3	4	4	4	4
Ability to accommodate increased traffic *	3	3	3	3	3	3	2	2	2	2	4	4
Access												
Proximity to capitol campus	3	3	3	3	3	3	1	1	1	1	3	3
Easy Public accessibility/wayfinding	2	2	2	2	2	2	2	2	2	2	2	2
Encourages Mass Transit use	3	3	3	3	3	3	2	2	2	2	3	3
Design Potential												
Compatibility and responsiveness to surrounding context	4	3	3	2	2	2	4	4	5	5	3	3
Massing allows for good design	2	2	2	2	2	2	4	4	4	4	3	3
Other												
Walking distance to amenities	4	4	4	4	4	4	Limited to site trails	2	2	2	2	2
Community Acceptance	4	3	3	2	2	2	4	4	5	5	4	4
Total	44	38	33	31	39	38						

Rating System

Criteria is rated from 1 to 5. A rating of 5 is a "worst case scenario" and a rating of 1 is a "best case scenario".

The lower the total rating, the better the site meets the criteria and is suitable for the Transportation Agencies Co-location facility.

* Note: Ratings may change with further study of these issues.

Alternative Development Strategies and JLARC Analysis

A financial analysis was undertaken to compare the development and life cycle costs for the six development options using two approaches.

In the first approach, total development and life-cycle costs were estimated and compared using the JLARC model for the following two methods the state has available for procuring and owning the proposed project:

- The traditional *public-works process* whereby the state both develops and owns the building. For purposes of the analysis, it is assumed that the state would use the General Contractor-Construction Manager (GC-CM) method, a form of public works design-build, to undertake development of the proposed project. The state could also use Design-Build, the procurement method used in the early 1990's for construction of the Labor and Industries, Natural Resources, and Ecology office buildings.
- The *lease-development process* whereby a private developer would build the facility, based on specifications provided by the state, and initially lease the building to the state. Provisions in the lease would allow the state the option of purchasing the building after a specified number of years.

In the second approach, the life-cycle costs of the proposed new Transportation Agency building were compared against a scenario in which the agencies continue to lease space in dispersed facilities throughout Thurston County (Dispersed Facility Option).

Comparison of New Project: State Developed/Owned versus Private Lease Development

Development Costs: The total project costs under each option reveal an insignificant difference whether the building is developed by the state or by a private developer. The analysis assumes that hard construction costs, which represent approximately 75% of total project costs (exclusive of land), would be the same whether the project was constructed under state ownership or by a private developer. While soft costs, such as consultant services and construction project management, are assumed to be lower if the project were developed privately, these cost savings are offset by the private developer's requirement for profit, which is not necessitated under state development.

Life-Cycle Costs: The present value of life cycle costs over a 25 year period are significantly higher under private lease development as compared to the cost of state development and ownership. The substantial cost penalty under private lease development for all options is due to three factors:

- A privately developed/owned project would require financing at private mortgage rates, which are assumed at 2.5% higher than the cost of state financing through tax-exempt bonds or related debt financing.
- Under private ownership, the property would be subject to property taxes which would in turn be passed on to the state tenant through higher lease costs. If the state owns the project, the building would not be on the tax rolls, and thus property taxes would not be required.
- During the period owned by private developer, a rate of return would be required that would not be necessitated on a state-owned project. This return on investment would accrue to the developer through both annual lease costs and profit upon sale to the state when purchase option is exercised.

Preliminary Conclusions

Based on the work completed over the course of this project and the estimated costs and benefits for the six options, the following observations were offered by NBBJ, the state's planning consultant:

1. Currently, the individual agencies that are candidates for the co-located Transportation Agencies Building are distributed across 22 leased office locations yielding significant dysfunctionality and opportunity costs for each agency.
2. The proposed co-located facility will achieve long sought-after adjacencies and efficiencies in a large building that will itself be a major presence in any of the three candidate jurisdictions.
3. The State's expressed desire, captured in this analysis, to develop facilities of higher initial quality in the interest of long-term cost-effectiveness, represents a return to the course charted with the Capitol Campus Master Plan and the development expectations in each of the three cities.
4. Fully achieving the expressed intentions for quality state facilities and high density of development, and living up to the expectations created by the three Master favors developing the co-located Transportation Agencies Building either:
 - On the Olympia Campus (with parking underneath), or
 - On the Tumwater Campus (with all structured parking).
5. Those two solutions are estimated to be more costly initially than the more-difficult-to-permit option of building the proposed facility on the Tumwater Campus with surface parking.
6. State development and ownership (public works) is the most appropriate and cost-effective method for procuring and operating the proposed co-located Transportation Agencies building in each of the six development options.
7. The difference in total life cycle costs between building a new Transportation Agencies facility and continuing to lease space in dispersed facilities is not significant when both options are considered in similar physical arrangements (all surface parking). Given the significant benefits to co-location, as well as the substantial improvement in the quality of space afforded by a new building, the construction of a new Transportation Agencies building is an appropriate and cost-effective option for Washington state.

NEXT STEPS – TRANSPORTATION AGENCIES PROJECT

GA will be submitting the analysis of 10-year transportation-related Thurston County office needs and an evaluation of the planned facility design and budget as required in Section 303 of the Transportation Budget in early January 2000.

Should the Legislature wish to continue with project planning, the following tasks could be initiated:

- A pre-design including the requisite functional and space program and additional detailed cost-benefit analyses of the Olympia and Tumwater Options. The full range of Transportation Demand Management (TDM) Strategies would be defined and evaluated in the pre-design in order to refine parking demand estimates and to reduce parking requirements and costs to the minimum acceptable level. Final site and building plans would reflect TDM strategies adjusted to specific locations. A full pre-design is estimated to cost \$400,000. A study continuation appropriation of at least \$100,000 would permit valuable work short of a full pre-design, however.
- An Environmental Impact Statement (EIS) with three alternatives: 1) Olympia with parking underneath, 2) Tumwater with surface parking, and 3) Tumwater with structured parking. An EIS is estimated to cost \$150,000.
- An estimate of all on and off-site mitigation costs and an evaluation of existing geo-technical and other environmental factors must also be made. This can be accomplished for \$200,000.

SUMMARY OF SPACE REQUIREMENTS FROM LEGISLATIVE BUILDING COMMISSION STUDY

The 1999 Legislature by House Concurrent Resolution 4410 established the Commission of Legislative Building Preservation and Renovation "...to identify a plan and resources for the renovation and preservation of the state legislative building." Included in the scope of this directive was to develop a plan to address space and relocation issues.

The Commission completed its work, and in January will submit a plan to the Legislature. The three space-related items in that proposal are as follows:

1. The need to replace 10,650 to 13,500 square feet of occupied space that will be displaced by infrastructure upgrades. The need for this replacement space was independently validated by a BEST (Value Engineering) Study Team.
2. A need to develop 5,350 square feet of space to accommodate the public. This includes public meeting rooms for visiting school groups and general public meetings, visitor services administration, a tour guide office area, and visitor-related storage. This estimate does not include space for exhibits or educational activities.
3. Construction of a 37,000 square feet Capitol Addition. This would provide space for current public and relocation needs, and future needs. It would also:
 - Improve efficiency through consolidation of legislative offices currently in leased space off campus;
 - Provide space adjacent to the Legislative Building.
 - Add to the functionality of the Cherberg and O'Brien Buildings by creating a connecting pathway between the buildings and the Legislative Building.
 - Create space consistent with the original design.
 - Provide temporary space during rehabilitation at no additional cost.

Estimated cost of construction of the Capitol Addition is \$18.6 million – temporary relocation costs for the Legislative Building rehabilitation included.

The schedule and timing of the proposed Legislative Building rehabilitation plan is as follows:

Complete Supplemental Studies	July 2000 – June 2001 (12 months)
Construct Capitol Addition and Pathway	May 2002 – October 2003 (18 months)
Rehabilitate Legislative Building.....	April 2004 – March 2007 (36 months)
Complete Exterior Preservation.....	April 2006 – December 2007 (18 months)

THURSTON COUNTY DSHS LEASED FACILITIES

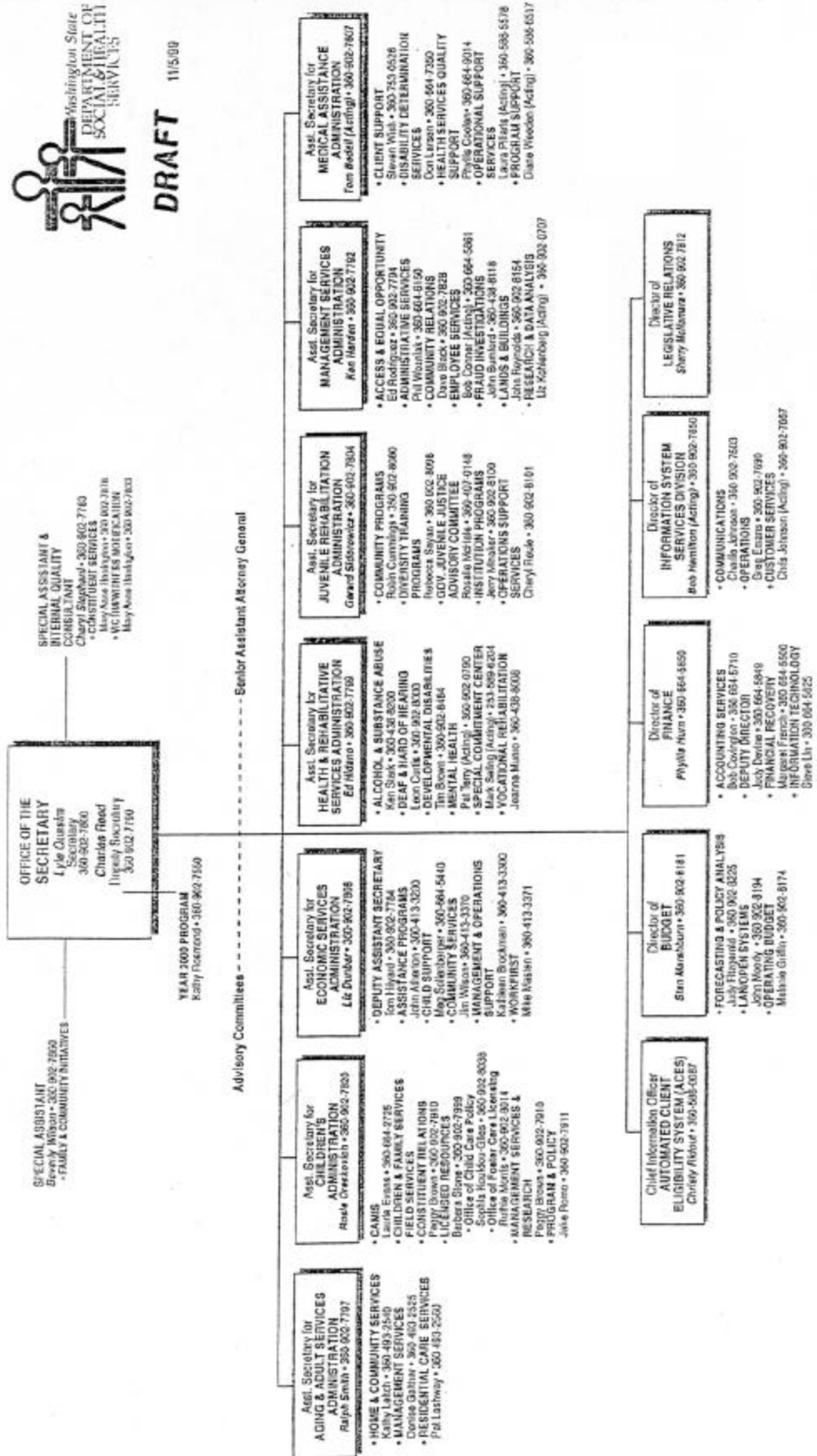
The Department of Social and Health Services (DSHS) has seven distinct executive administrations and five executive functions directed by the Office of the Secretary/Deputy Secretary. (See Organizational Chart) Throughout Thurston County, DSHS leases office and warehouse space in 25 different locations. The Office of the Secretary and its executive members are located in Office Building 2 (OB-2) – Capitol Campus. The five executive functions and the seven executive administrations are located in both OB-2 and in leased facilities throughout Thurston County, governed by 26 Lease agreements.

City	Address	Sq. Ft.	Administration
Lacey	7240 & 7240B Martin Way	7,999	Economic Svcs Health and Rehabilitative Svcs
	6135 Martin Way (Olympia Address)	27,000	Children's (Svc Delivery)
	600 Woodland Square Loop Bldg A	33,184	Aging and Adult Svcs
	4408 7 th Ave – Woodland Square Bldg C	33,184	Health and Rehabilitative Svcs Management Svcs
	1009 College St. SE – Lacey Government Ctr	59,711	Children's Economic Svcs
	4450-4500 10 th Ave SE Blake Office Park	109,556	Health and Rehabilitative Svcs Finance
	720 Sleater Kinney	7,070	Health and Rehabilitative Svcs
Olympia	712 Pear Street – Cap View I	70,000	Economic Svcs
	724 Quince Street – Cap View 2	27,292	Aces
	112 NE Henry Street	9,025	Economic Svcs
	3660 B Pacific	3,200	Management Svcs
	3704 Griffin Lane	7,614	Juvenile Rehabilitation
	204 East 11 th Street	4,192	Management Svcs
	617 & 623 8 th Avenue SE – TS Bldg. 1 & 2	80,100	Medical Assistance
	1011 Plum Street – Town Square, Bldg. 5	33,688	Medical Assistance
	925 Plum Street – Town Square, Bldg 4	9,403	Medical Assistance
	805 Plum Street – Town Square, Bldg 6	25,304	Medical Assistance
Tumwater	6337 Capital Blvd – Point Plaza Bldg. 2	49,984	Medical Assistance Aging & Adult Services
	7171 Cleanwater Lane	8,640	Health & Rehabilitative Svcs
	6330 Capital Blvd.	6,000	Aging & Adult Svcs
	5000 Capital Blvd.	46,020	Economic Svcs (Svc Delivery)
	78 th , 79 th , & Arab Drive (3 Warehouses)	111,535	Records



DRAFT

11/5/09



DSHS LEASED FACILITIES - OLYMPIA

December 16, 1999

712 Pear St.
Capitol View 1



724 Quince St.
Capitol View 2
(co-located Labor and Industries)



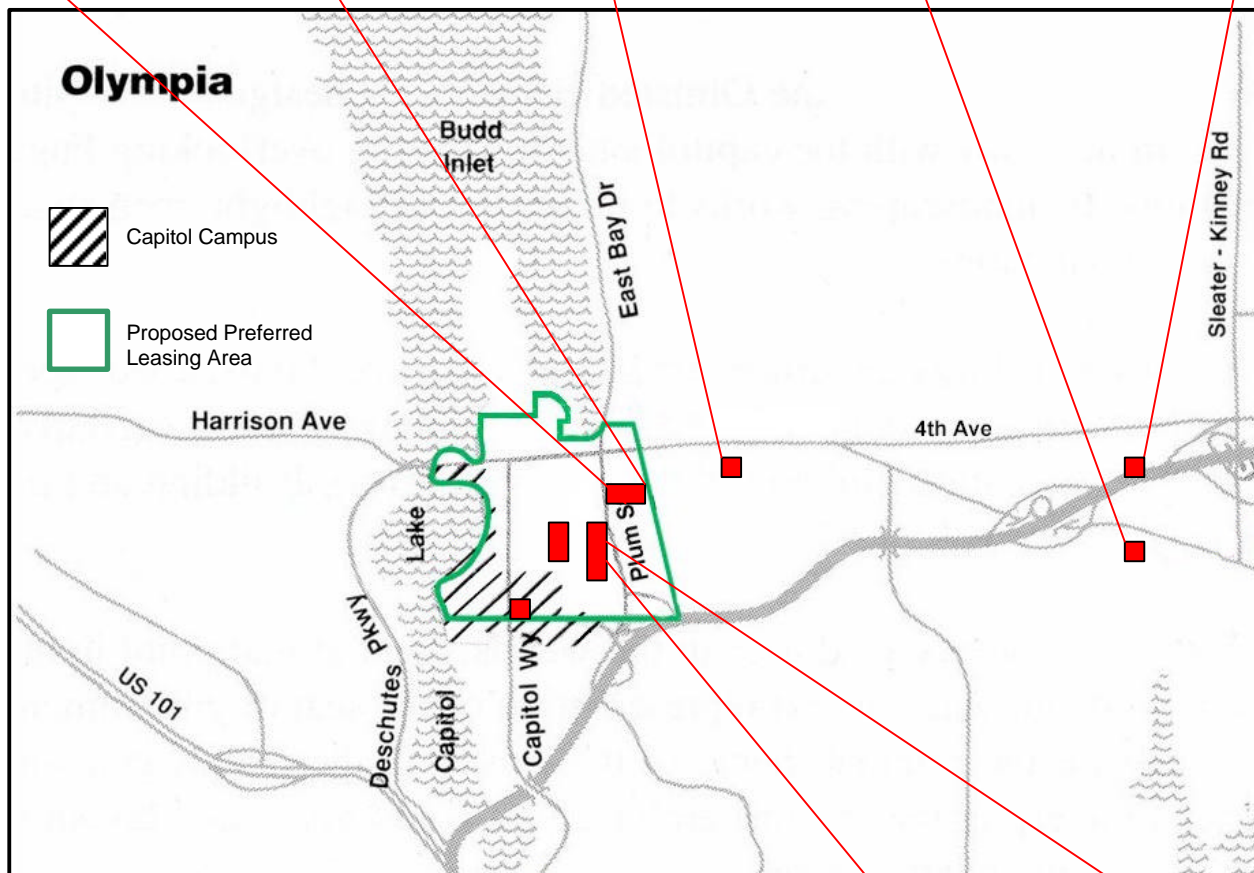
112 NE Henry Street



3660B Pacific



3704 Griffin Ln.



204 East 11th Ave.
Pro Art Bldg



617 & 623 8th Ave
Town Square Bldg 1 & 2



925 Plum St.
Town Square Bldg 4
(co-located CTED, Office of Public Defense)



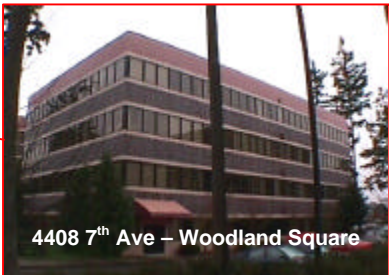
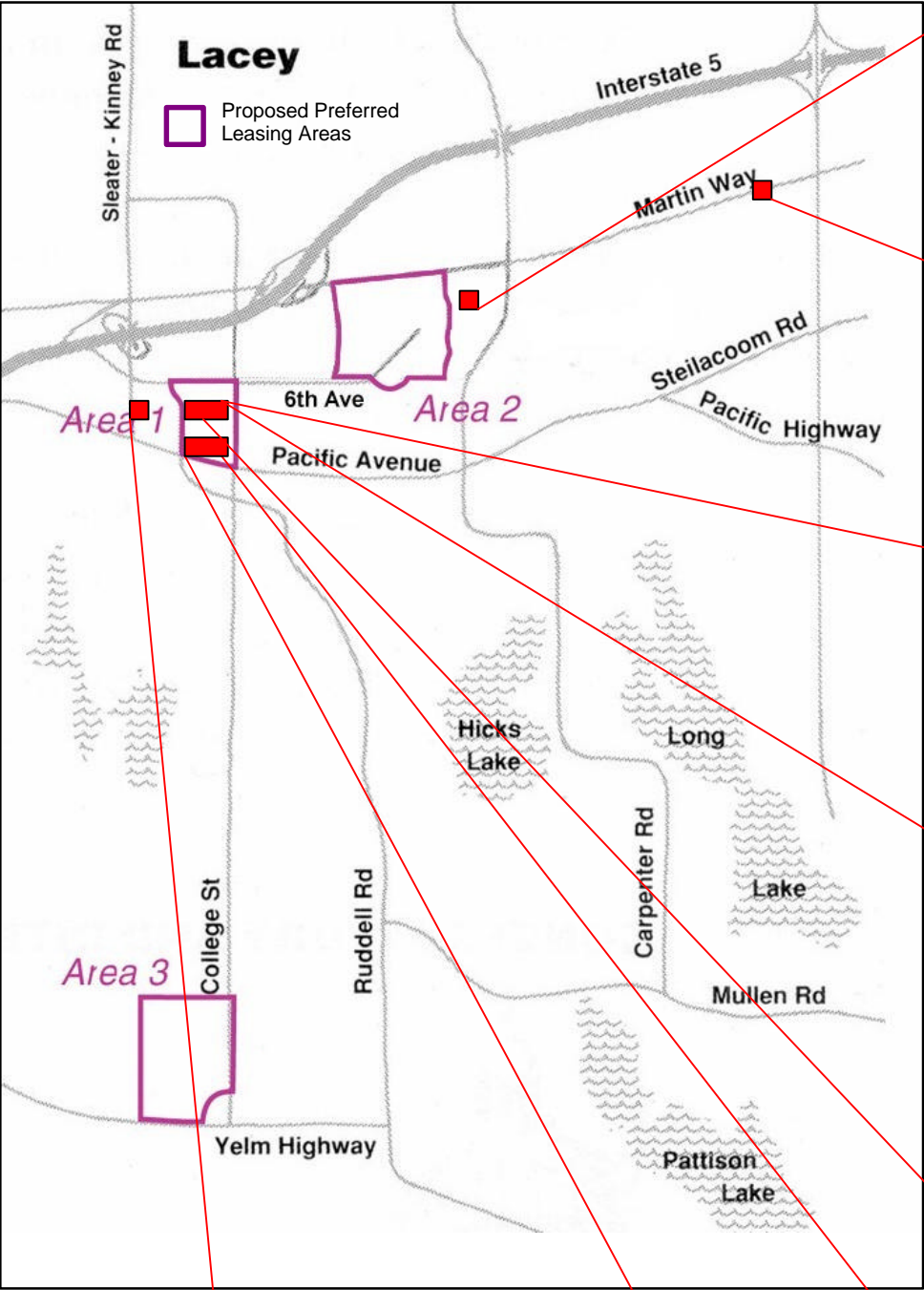
1011 Plum St.
Town Square Bldg 5
(co-located Dept. of Veteran's Affairs)



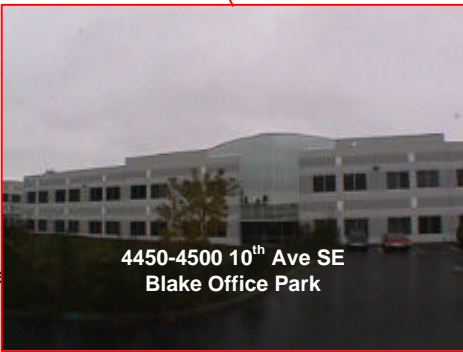
805 Plum St.
Town Square Bldg 6
(co-located Labor and Industries)

DSHS LEASED FACILITIES - LACEY

December 16, 1999

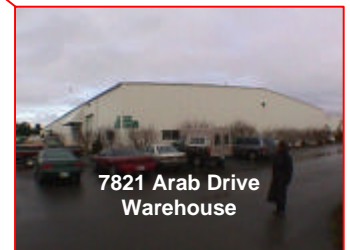
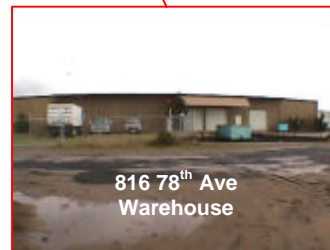
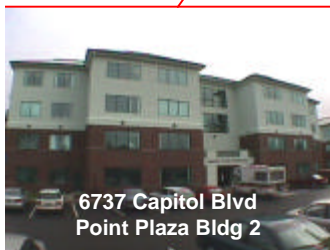
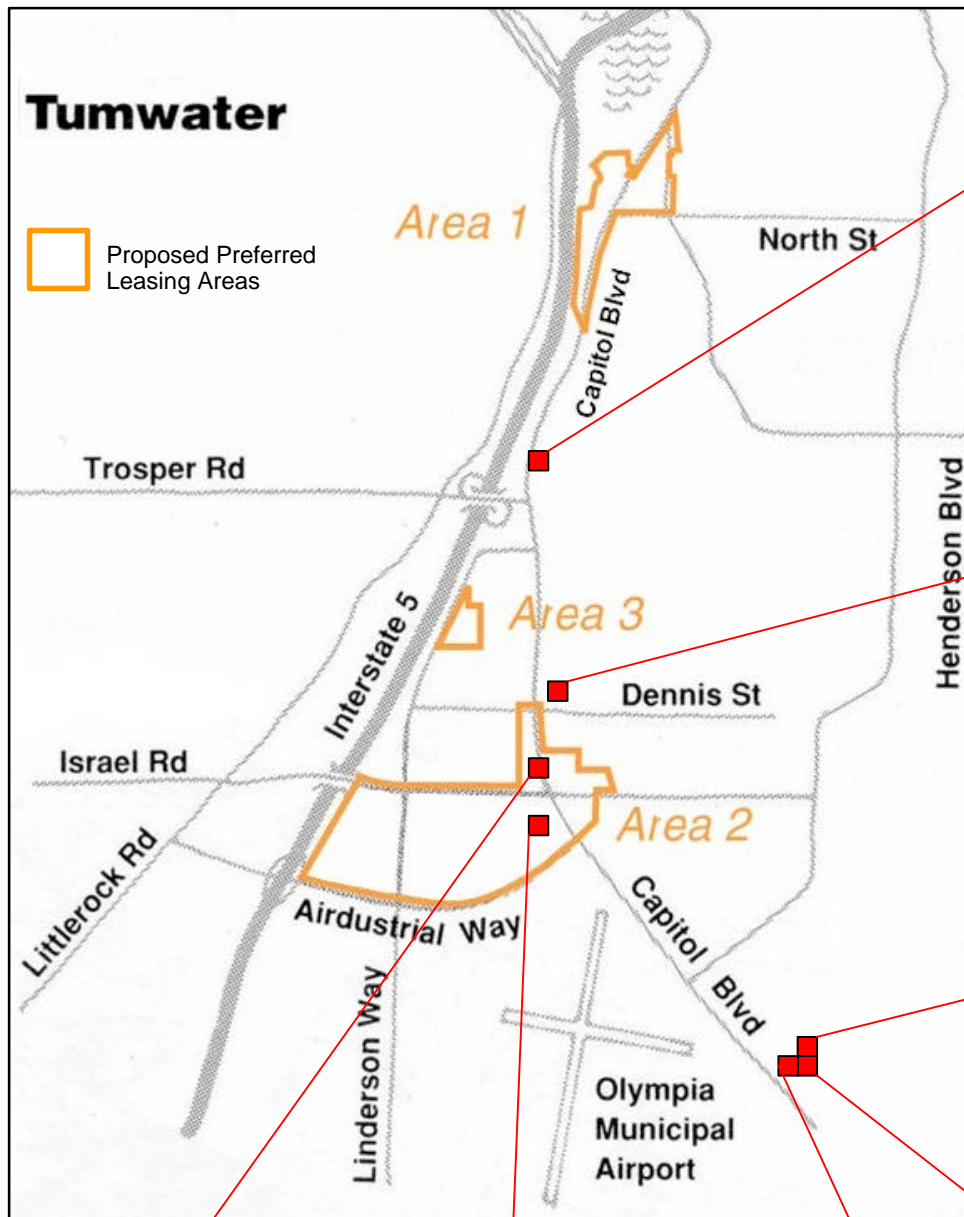


Division of Aging and Adult will move from Building A to a new location in April, 2000



DSHS LEASED FACILITIES - TUMWATER

December 16, 1999



DSHS Leased Office Building Size Analysis

December 16, 1999

